

2014 Kigoma Reproductive Health Survey

Kigoma Region, Tanzania



US Department of Health and Human Services
Centers for Disease Control and Prevention

The findings and conclusions in this paper are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Suggested citation:

Centers for Disease Control and Prevention. *2014 Kigoma Reproductive Health Survey: Kigoma Region, Tanzania*. Atlanta, GA: Centers for Disease Control and Prevention; 2015. <http://www.cdc.gov/reproductivehealth/Global/Publications/Surveys/Africa/Kigoma-Tanzania/index.htm>.

FOREWORD

This 2014 Kigoma Reproductive Health Survey (RHS) report presents findings from a population-based health survey conducted in collaboration with government agencies, nongovernmental organizations, and other public and private partners. The report includes key indicators that aim to inform the decisions of policy makers, program managers, and other stakeholders invested in supporting and improving reproductive health in Kigoma Region.

The government of Tanzania values collaboration with its development partners to achieve shared goals for reproductive health. Through these partnerships, Bloomberg Philanthropies has supported country efforts to improve maternal and newborn health for more than 8 years.

The Ministry of Health and Social Welfare (MoHSW) wishes to thank members of MoHSW Reproductive and Child Health who provided valuable contributions: Dr. Georgina Msemu, Dr. Koheleth Winani, Clement Kihinga, and Moris Hiza. MoHSW also acknowledges Kigoma Regional Medical Officer Dr. Leonard Subi and other members of Kigoma health management teams as critical to the success of the 2014 Kigoma RHS.

We wish to express gratitude to Bloomberg Philanthropies for providing financial support via the CDC Foundation and contributions to the questionnaire content. The World Lung Foundation and EngenderHealth—nongovernmental organizations providing reproductive health and family planning interventions in Kigoma Region—also contributed to the questionnaire content.

We recognize Abdallah Mwinchande, Patrick Kanyamwenge, and Fredrick Ananga at AMCA Inter-Consult Ltd., who trained field staff and organized and supervised survey implementation logistics. We also wish to thank the staff of the US Centers for Disease Control and Prevention, both in Tanzania and in Atlanta, for providing technical assistance in questionnaire design, field staff training, data analysis, and report writing.

We are particularly grateful to the enumerators from Kigoma and Dar es Salaam whose hard work enabled the collection of quality data. Finally and most importantly, we would like to thank the women who agreed to participate in the survey and contribute important information to the evidence base for reproductive health in Kigoma Region.



Dr. Neema Rusibamayila
Director of Preventive Services
Ministry of Health and Social Welfare
United Republic of Tanzania



2014 Kigoma Reproductive Health Survey

Kigoma Region, Tanzania

Partners:

Tanzania Ministry of Health & Social Welfare

Kigoma Region Government

Bloomberg Philanthropies

EngenderHealth

World Lung Foundation

AMCA Inter-Consult Ltd.

CDC Foundation

US Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion

Division of Reproductive Health



CONTENTS

| | |
|--|------------|
| Key Findings and Conclusions from the Kigoma 2014 Reproductive Health Survey..... | 1 |
| Chapter 1: Introduction | 5 |
| 1.1 Background and Purpose..... | 5 |
| 1.2 Western Zone and Tanzania: Reproductive Health Indicators in Context..... | 5 |
| 1.3 Survey Objectives | 7 |
| 1.4 Survey Methods..... | 8 |
| 1.5 Ethics Approval..... | 10 |
| Chapter 2: Households, Women, and Births Since January 2009 | 11 |
| 2.1 Household Characteristics..... | 11 |
| 2.2 Characteristics of Respondents | 14 |
| 2.3 Characteristics of Births Since January 2009..... | 18 |
| Chapter 3: Fertility | 23 |
| 3.1 Fertility Levels..... | 23 |
| 3.2 Fertility Preferences and Planning Status of Previous Pregnancies..... | 28 |
| 3.3 Future Fertility Preferences..... | 31 |
| Chapter 4: Family Planning | 35 |
| 4.1 Contraceptive Knowledge..... | 35 |
| 4.2 Ever Use of Contraception..... | 37 |
| 4.3 Current Use of Contraception | 39 |
| 4.4 Number of Living Children at First Use of Contraception..... | 45 |
| 4.5 Source of Modern Contraception Methods..... | 46 |
| 4.6 Time to Source of Modern Contraception Methods..... | 49 |
| 4.7 Availability of Family Planning Services at Government Facilities | 50 |
| 4.8 Payment for Contraceptive Methods..... | 50 |
| 4.9 Preferred Contraceptive Method Among Current Users | 51 |
| 4.10 Contraceptive Decision Making Among Current Users..... | 53 |
| 4.11 Reasons for Non-Use of Contraception | 54 |
| 4.12 Future Intentions of Non-Users and Preferred Method | 56 |
| 4.13 Unmet Need for Contraception..... | 59 |
| Chapter 5: Maternal and Perinatal Health..... | 63 |
| 5.1 Antenatal Care..... | 63 |
| 5.2 Use of Local Herbs During Pregnancy..... | 68 |
| 5.3 Delivery | 70 |
| 5.4 Postnatal | 88 |
| Chapter 6: Infant, Child, and Perinatal Mortality..... | 99 |
| Chapter 7: Opinions About Contraception and Family Planning | 105 |
| 7.1 Opinions About Family Planning..... | 105 |
| 7.2 Family Planning Information | 111 |
| Chapter 8: Early Sexual Activity | 121 |
| 8.1 Relationship to First Partner..... | 121 |
| 8.2 Wantedness of First Sex..... | 123 |
| 8.3 Contraceptive Use at First Sex..... | 124 |

| | |
|--|------------|
| Chapter 9: Summary of Findings and Implications | 129 |
| 9.1 Reproductive Health | 129 |
| 9.2 Fertility Levels and Unmet Need for Family Planning Services | 130 |
| 9.3 Family Planning | 130 |
| Abbreviations | 132 |
| Appendices A and B: Household and Individual Questionnaires | 133 |

KEY FINDINGS AND CONCLUSIONS FROM THE 2014 KIGOMA REPRODUCTIVE HEALTH SURVEY

The 2015 Kigoma Reproductive Health Survey assesses many reproductive health indicators for women of reproductive age (15-49 years). Key findings and actionable conclusions include:

Pregnancy Health

Finding: Although almost all women receive antenatal care (ANC) during their pregnancies, very few (17%) begin receiving this care during the first trimester, the time when health problems can be detected early. Furthermore, during ANC care visits, fewer than half of women reportedly receive instruction on pregnancy complications or have their blood pressure checked.

Conclusion: Community mobilization is needed to encourage ANC visits in the first trimester. At each ANC visit, providers should review pregnancy complications, measure blood pressure, and advise women to receive at least four ANC visits.

Finding: Distance to health services is a barrier for many women accessing care, particularly in rural areas. The cost of transportation prevents many women from delivering in facilities, even if they have made transportation plans.

Conclusion: Increased geographic coverage of quality health service providers is needed. In addition, transport voucher programs and community transport funds could help to offset the transportation costs (which are higher in rural areas).

Labor, Delivery, and Postpartum Care and Counseling

Finding: Half of births occur at home. Women who are older, have less education, and are of lower socioeconomic status are more likely than other women to deliver at home, a decision they often report having made themselves.

Conclusion: Since almost all women receive ANC at some point during their pregnancies, ANC providers should use those opportunities to discuss delivery in health facilities with skilled birth attendants, show the facility amenities, and encourage women to have a birth plan.

Finding: Although most (86%) newborns receive a well-baby (postnatal) check within 2 months of birth, very few women (13%) attend a postnatal check for their own health.

Conclusion: Women's postnatal health could benefit from more attention and resources; maternal health and family planning services could be combined with well-baby care.

Finding: It is advisable for all women to receive family planning counseling before, during, and after delivery. In Kigoma, 74% of women receive such counseling during pregnancy, but very few (2%) receive it at the time of delivery, and only 28% receive counseling postpartum.

Conclusion: Health facility staff should routinely provide family planning counseling before women leave the facility after giving birth.

Child Health and Mortality

Finding: Vital registration is low in Kigoma; for women's most recent live births, only 3% of babies born at home and 10% of those born at a facility are reported to have a birth certificate.

Conclusion: Strengthening vital registration is a government priority and an essential strategy in monitoring efforts to improve the health of the population. The barriers to vital registration in facilities and in the communities need to be examined and addressed.

Finding: Child mortality rates have fallen, but fertility rates remain high. Kigoma has not yet gone through a demographic transition.

Conclusion: Increased use of family planning to reduce the number of births and increase the time between births could lower rates of both child and maternal mortality.

Family Planning

Finding: Fertility rates in Kigoma are higher than those of Tanzania as a whole, and both knowledge of and use of contraceptive methods are lower in Kigoma. Although most women have heard of short-term methods such as injectables and the pill, fewer have heard of the long-acting reversible methods such as the IUD and implants.

Conclusion: Informational campaigns should improve awareness of long-acting methods among women. Providers' training could ensure that health workers are skilled to both provide counseling and insert IUDs and implants. Family planning logistic management efforts should address shortages and unavailability of products.

Finding: Most women have favorable opinions about family planning, but only 16% of women in union are currently using a modern contraceptive method.

Conclusion: Family planning information and counseling should be provided during pregnancy and well-child visits, including an emphasis on the health benefits to both women and their children. Greater availability of implants and IUDs in health facilities would enable increased use of these long-acting, reversible methods.

Finding: The injectable is the most popular method among women currently using contraception (9% of women in union are using the injectable, or more than half of modern method users). It is also by far the most popular method among women not currently using a method who thought they might in the future; almost half (47%) said they would choose the injectable.

Conclusion: Since women using the injectable must return to dispensaries periodically for supplies, these visits could be used to educate women about all methods of contraception, including the long-acting, more effective methods.

Finding: About half of women are not aware that modern contraceptive methods are effective at preventing pregnancy or are safe for their health.

Conclusion: Community outreach efforts, including information about family planning and contraceptive methods are urgently needed, especially targeting rural women and young women aged 15-19, whose levels of knowledge are lower.

Finding: Among women who are not currently using contraception, the leading reasons for non-use are their desire to become pregnant and their fear of side effects. Contraceptive side effects are generally not well understood; nearly two-thirds of all women mistakenly think that using birth control pills or injectables would reduce their ability to get pregnant in the future.

Conclusion: More education is needed about the health benefits and effectiveness of contraceptive methods and about their side effects.

Finding: Almost all young, sexually active women aged 15-24 years did not use contraception the first time they had sexual intercourse. Nearly half (45%) of these women did not use contraception because they wanted to become pregnant, but 17% did not because they did not know about contraception at the time.

Conclusion: Family planning education is needed for young women in particular.

Finding: Overall, 39% of women who are married or in union have an unmet need for family planning. Most of this need (32%) is for spacing births (women in Kigoma prefer birth spacing intervals of at least 2 years), and 7% of the need is for limiting births.

Conclusion: Improving the use of reliable and reversible methods of contraception is the best approach to reducing unmet need for spacing. As rural women and women with low levels of education have the highest levels of such unmet need, efforts to increase and meet demand for family planning should be particularly focused on those groups.

Finding: Two-thirds of women prefer to get information on family planning from clinic health workers. More than half of women said that receiving information about family planning in religious settings or on the radio was acceptable.

Conclusion: Health facility visits are a good opportunity for trained health workers to educate women about family planning and maternal health services. Radio seems to be an acceptable source, and religious settings appear to be accepted venues.

CHAPTER 1: INTRODUCTION

1.1. Background and Purpose

The Ministry of Health and Social Welfare in Tanzania has developed national strategies to reduce maternal deaths and improve reproductive health through strengthening antenatal care provision, expanding emergency obstetric care services, and increasing knowledge and use of contraception.

The ministry also has collaborated with multiple nongovernmental partners to achieve shared goals for improving reproductive health. For more than 8 years, Bloomberg Philanthropies has supported efforts to improve maternal and newborn health by upgrading facilities to better provide comprehensive emergency obstetric and neonatal care (CEmONC) services in Kigoma, Pwani, and Morogoro Regions. Bloomberg is now expanding activities in Kigoma Region to integrate family planning and comprehensive post-abortion care into various health facilities, including the health centers that have already been upgraded to provide CEmONC services.

Evaluating the impact of such interventions is vital to achieving Tanzania's reproductive health goals, including maternal mortality reduction. The 2014 Kigoma Reproductive Health Survey (RHS) was designed to provide a reliable baseline assessment of demographic indicators related to maternal and newborn health outcomes, knowledge and use of maternal health services, knowledge and use of contraception, and exposure to health promotion programs. When the follow-up survey is conducted in several years, the evaluators plan to assess the impact of the planned expansion of services. Secondary survey objectives include understanding women's fertility and health care service utilization preferences, attitudes about family planning, and access to media and cell phone coverage, with a goal of informing health promotion programming.

This report presents the findings from the 2014 Kigoma RHS. This introductory chapter provides an overview of the current status of reproductive health among women of reproductive age in Tanzania's Western Zone, including comparisons with Tanzania as a whole. In addition, it describes details of the survey methodology. Subsequent chapters of this report detail topic-specific findings.

1.2 Western Zone and Tanzania: Reproductive Health Indicators in Context

The 2014 Kigoma RHS was conducted throughout Tanzania's Kigoma Region. One of 30 regions in Tanzania, Kigoma is located in the northwest corner of the country (Figure 1.1), bordering Lake Tanganyika, the Democratic Republic of Congo, and Burundi. It covers 45,066 square kilometers, 27% of which consist of arable and grazing land; the remaining area consists of forest and water. Administratively, the region is divided into eight districts. According to the 2012 National Census of Population and Housing, Kigoma Region had a population of 2,127,930 with 374,479 households, an average household size of 5.7, and an annual population growth rate of 2.4%. Approximately 83% of households in Kigoma are classified as rural.²

Figure 1.1: Kigoma's Location in Tanzania



Map: Grounds for Health.¹

Prior to this 2014 survey in Kigoma, the most recent survey was the 2010 Tanzania Demographic and Health Survey (DHS)²; findings were presented down to the zone level, using the classifications employed by the Reproductive and Child Section of the Ministry of Health and Social Welfare. Administrative areas were collapsed into seven geographic zones; Kigoma, Tabora, and Shinyanga Regions make up the Western Zone. The 2010 DHS was not designed to be representative at the regional level, and the 2014 Kigoma RHS was borne out of Bloomberg Philanthropies' desire for more detailed population-based reproductive health information specific to Kigoma Region. Thus, all zone- and national-level indicators discussed in this chapter come from the 2010 DHS.

The 2010 DHS data indicated that fertility, contraceptive use, access to obstetric care services, and mortality rates varied by zone.² Regarding fertility, the overall total fertility rate in Tanzania was 5.4 births per woman. The Western Zone, however, had the highest total fertility rate in the country (7.2 births per woman), and the highest percentage of women aged 15-49 years who were pregnant when interviewed (13%). Nationwide, fertility was strongly associated with both the educational attainment and wealth status of the mother. The poorest women, for example, had more than twice as many children as women living in the wealthiest households (7.0 vs 3.2 children per woman, respectively).

Use of contraception varied by zone, despite widespread knowledge of contraception. Results from the 2010 DHS showed that both nationally and in the Western Zone, 99% of women aged 15-49 years knew of at least one modern contraceptive method.² Use of any contraceptive method, however, was lower in the Western Zone than in the nation overall (20% and 34%, respectively), as was use of any modern method (15% and 27%, respectively). The 2010 DHS also showed that use of modern family planning varied by residence nationwide; modern methods were used by 34% of married women in urban areas, compared with 25% in rural areas.

Access to obstetric care services varied substantially within Tanzania. A smaller proportion of deliveries took place in health facilities in the Western Zone (37%) than in the nation as a whole (52%). Women in the Western Zone also had fewer deliveries by a skilled provider (38% and 51%, respectively) and fewer deliveries by cesarean section than did women nationwide (3% and 5%, respectively).

Furthermore, the 2010 DHS data document higher mortality in the Western Zone than in the nation overall²; infant mortality was 56 deaths per 1,000 live births compared with 51 deaths per 1,000 live births nationwide, and child (younger than 5 years old) mortality was 98 deaths per 1,000 live births compared with 81 deaths per 1,000 live births nationwide.

Table 1.1 compares additional reproductive health indicators between the 2010 DHS (nation and Western Zone) and 2014 RHS (Kigoma Region).

Table 1.1: Key Reproductive Health Indicators for Tanzania, the Western Zone, and Kigoma Region

| Indicator | DHS-2010 | | RHS-2014 |
|--|----------|-----------------|---------------|
| | Tanzania | Western Zone | Kigoma Region |
| Fertility | | | |
| Currently married/in union | 63.2% | 68.0% | 63.7% |
| Currently pregnant | 9.6% | 12.9% | 10.4% |
| Total fertility rate | 5.4 | 7.2 | 6.7 |
| Family planning | | | |
| Knows any contraceptive methods | 98.0% | 98.9% | 96.3% |
| Knows any modern contraceptive method | 97.9% | 98.9% | 96.0% |
| Currently using any contraceptive method (women in union) | 34.4% | 20.1% | 20.6% |
| Currently using a modern method (women in union) | 27.4% | 14.6% | 15.6% |
| Currently using pill (women in union) | 6.7% | 2.6% | 1.4% |
| Currently using injectable (women in union) | 10.6% | 5.4% | 8.9% |
| Currently using IUD (women in union) | 0.6% | 0.5% | 0.3% |
| Currently using female sterilization (women in union) | 3.5% | 3.0% | 2.1% |
| Currently using condom (women in union) | 2.3% | 1.9% | 0.9% |
| Currently using periodic abstinence (women in union) | 3.1% | 1.8% | 2.2% |
| Want no more children | 29.7% | 20.1% | 19.4% |
| Want to delay birth at least 2 years | 43.5% | 52.5% | 51.7% |
| Ideal family size | 4.9 | 5.8 | 6.5 |
| Child mortality (rates per 1,000 live births during previous 5 years) | | | |
| Perinatal mortality | 36 | 29 | 29 |
| Neonatal mortality | 26 | 25 ^a | 16 |
| Infant mortality | 51 | 56 ^a | 30 |
| Mortality under age 5 years | 81 | 98 ^a | 56 |
| Maternal and perinatal health | | | |
| At least four antenatal care visits | 42.8% | N/A | 42.1% |
| Delivered in health facility | 50.2% | 36.5% | 47.0% |
| Delivered by C-section | 4.5% | 2.8% | 3.5% |
| Delivered by skilled provider | 50.6% | 37.5% | 48.3% |
| Postnatal check-up (mother) | 35.4% | 29.1% | 12.5% |

Abbreviations: DHS-2010, 2010 Tanzania Demographic and Health Survey; IUD, intrauterine device; RHS-2014, 2014 Kigoma Reproductive Health Survey.

^a Rate per 1,000 live births during previous 10 years.

Sources: DHS-2010, RHS-2014.

1.3 Survey Objectives

Objectives for the survey of Kigoma Region included the following:

1. To assess baseline knowledge and use of key maternal health services, including family planning, antenatal care, delivery care, and postnatal services among women of reproductive age.
2. To measure contraceptive prevalence rates and related parameters.
3. To measure key demographic indicators that are affected by use of family planning and maternal and newborn services.
4. To obtain data on reproductive health knowledge, attitudes, and behavior of young women aged 15-24 years, and to assess their exposure to sex education and family planning health promotion programs.

1.4 Survey Methods

The 2014 RHS employed a regionally representative probability sample and consisted of face-to-face interviews with women aged 15-49 years, regardless of marital status. This baseline survey was conducted in Kigoma Region during August-September 2014. This baseline survey aimed to produce data that will be comparable to the next survey in Kigoma Region, which is currently scheduled for June-July 2016.

Sample Design

This sample was selected to be representative of the Kigoma Region and to allow separate urban and rural estimates for key population and health indicators. The number of households included in the sample was calculated to yield approximately 4,000 interviews with women aged 15-49 years. The survey employed a multistage sampling design that used the 2012 Tanzania National Census of Population and Housing as the sampling frame.³

A two-stage selection process was used. The first stage involved systematic selection of 120 primary sampling units, using probability proportional to size sampling. The primary sampling units for the survey were enumeration areas (EAs), defined by the Tanzania National Bureau of Statistics. In June 2014, prior to the second stage, a complete household listing (described below) was created in all selected EAs. In the second stage, 35 households were selected for most EAs (88 of 120). One household was randomly selected as the starting point within each EA; interview teams visited that household and the next 34 from the household listing. For the 16 EAs with fewer than 35 total households, all households were interviewed. To compensate, 9-10 additional households were visited in the 16 sampled EAs that had experienced the fastest population growth since the 2012 Census. All women aged 15-49 years who were living in the selected households were eligible to be interviewed, and all who consented to participate were interviewed. Data were weighted at the household and the individual levels to account for changes in EA size since the 2012 Census and to yield the same distribution of the weighted sample by age group and rural/urban residence as in the 2012 Census.⁴

Cartography and Household Listing

The survey team obtained maps for Kigoma Region that were based on the 2012 Census from the National Bureau of Statistics.³ The survey cartography team went to the field in June 2014 to update the maps and create lists of all households in the selected EAs.

Response Rate

Table 1.2 displays household and individual response rates for the 2014 RHS. A total of 4,202 households was selected and visited. Up to three visits were made to each household if eligible respondents were not at home during the initial household visit, resulting in 3,838 completed household interviews (a response rate of 91%). A total of 4,091 (859 urban and 3,232 rural) eligible women of reproductive age were residing in those 3,838 households. Of these, 3,916 women were successfully interviewed, resulting in an individual response rate of 96% (94% urban and 96% rural). Only 0.3% of women of reproductive age refused to be interviewed.

Table 1.2: Response Rate for 2014 Kigoma Reproductive Health Survey

| | Households Responding (%) | Individual Women Responding, by Residence (%) | | |
|--|------------------------------|---|-------|-------|
| | | Urban | Rural | Total |
| Completed | 91.3 | 94.1 | 96.2 | 95.7 |
| Not at home | 4.1 | 2.8 | 1.6 | 1.9 |
| Refused | 0.6 | 0.8 | 0.2 | 0.3 |
| Dwelling not a household (Household only) | 3.7 | NA | NA | NA |
| Incapacitated (Women only) | NA | 0.7 | 1.1 | 1.0 |
| Other | 0.2 | 1.6 | 1.0 | 1.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of cases | 4,202 | 859 | 3,232 | 4,091 |

Survey Instruments

Two Swahili-language questionnaires were administered. The first was a relatively short household questionnaire (see Appendix A for English language version) which listed the usual residents of each household, described the demographic characteristics of each, and identified all women of reproductive age who lived there. The household questionnaire also included multiple questions regarding the characteristics of the household itself (e.g., water supply, number of rooms, roofing materials, durable goods owned by the family, etc.), which were later used to describe the relative wealth status of each household.

The second questionnaire was the questionnaire for individual women (see Appendix B), administered confidentially to each woman aged 15-49 years who agreed to be interviewed, and who resided in a selected household. Individual interviews took 30-60 minutes to complete. The questionnaire focused on women's knowledge and use of key maternal and child health services. It also included questions used to calculate key demographic indicators, such as the total fertility rate; unmet need for contraception; age at first union (marriage or informal union); age at first birth; and perinatal, neonatal, infant, and child mortality.

The specific topics included in the individual woman's questionnaire were:

- Characteristics (age, education, literacy, religiosity, marital status).
- Pregnancy history (lifetime pregnancies, pregnancy outcome, date, sex and survival status of live births, age at death for children who died).
- Antenatal care (source, timing of first visit, number of visits, content of care).
- Delivery (place, skilled birth attendance, type of delivery, delays, problems encountered, transport, referrals).
- Postpartum (care, use of family planning, amenorrhea, abstinence).
- Breastfeeding (initiation, duration).
- Family planning (knowledge, ever use, current use, source, counseling, attitudes).
- Fertility desires (timing of next pregnancy, preferred family size).
- Male involvement in maternal and child health issues such as family planning and delivery decisions.
- Exposure to family planning media messages and awareness campaigns at the community level.

Pilot Test and Survey Team Training

Training was first conducted in Kigoma Region during June 2014 with the specific goal of piloting the survey tools. For 5 days, the twelve-member survey pilot team was oriented to the details of the study data collection. The questionnaires were pilot tested in EAs that were not selected for the survey. Although the study data collection tools were translated into Swahili to ensure excellent communication with survey respondents, both English and Swahili were employed in the pilot test training. The clarity of the translations of all data collection tools was assessed at this stage.

Training for the final survey administration took place during 2 weeks in July and August 2014. Training consisted of lectures, discussions, and practice opportunities. Topics covered included survey logistics, survey questions, interviewing techniques, and both principles and practice of confidentiality. Six survey teams were selected, including one supervisor and three interviewers per team.

Data Collection

Data collection took place in August and September 2014. Each supervisor confirmed that his or her team went to each selected EA and visited all of the sampled households.

Before administering household questionnaires, interviewers explained to a member of each household what the study was about and obtained permission to conduct the household interview. Similarly, the study was explained to the women aged 15-49 years who lived in the household and who were at home. They were asked to participate, and their verbal and written consent was obtained prior to interview. Interviewers then administered the questionnaires confidentially with each woman who consented.

Supervisors reviewed the completed survey questionnaires in the field to ensure completeness, and then sent them to Kigoma for daily data entry. Data entry clerk supervisors recorded receipt of the questionnaires from the field and assigned the questionnaires to the data clerks, who entered all survey responses into CSPro version 5.0 (US Census Bureau). All completed and entered questionnaires were stored in a secure location in the data entry room in Kigoma and were transported to Dar es Salaam at the end of field data collection activities to be stored in a secure location.

Data cleaning took place in Dar es Salaam in the first 2 weeks of October 2014 and analysis was conducted using SAS statistical software, version 9.3 (SAS Institute, Inc., Cary, North Carolina).

1.5 Ethics Approval

The protocol for the baseline Kigoma Reproductive Health Survey received ethical approval from the US Centers for Disease Control and Prevention (CDC), CDC-Tanzania, and the Tanzania National Health Research Ethics Review Committee.

References

1. Grounds for Health. Available at: <http://www.groundsforhealth.org>.
2. The United Republic of Tanzania National Bureau of Statistics (NBS), ORC Macro. *Tanzania Demographic and Health Survey 2010*. Dar es Salaam, Tanzania: National Bureau of Statistics, ORC Macro; 2011.
3. NBS, Office of Chief Government Statistician. *2012 Population and Housing Census: Population Distribution by Administrative Areas*. Dar es Salaam and Zanzibar, Tanzania: NBS, Office of Chief Government Statistician; 2013.
4. NBS, Office of Chief Government Statistician. *Population Distribution by Age and Sex*. Dar es Salaam and Zanzibar, Tanzania: NBS, Office of Chief Government Statistician; 2013.

CHAPTER 2: HOUSEHOLDS, WOMEN, AND BIRTHS SINCE JANUARY 2009

The 2014 Kigoma Reproductive Health Survey assessed reproductive health outcomes for women of reproductive age (15-49 years). To provide context for these outcomes, this chapter summarizes the basic characteristics of the sampled households, respondents, and births since January 2009. In this report, key indicators are stratified according to these characteristics.

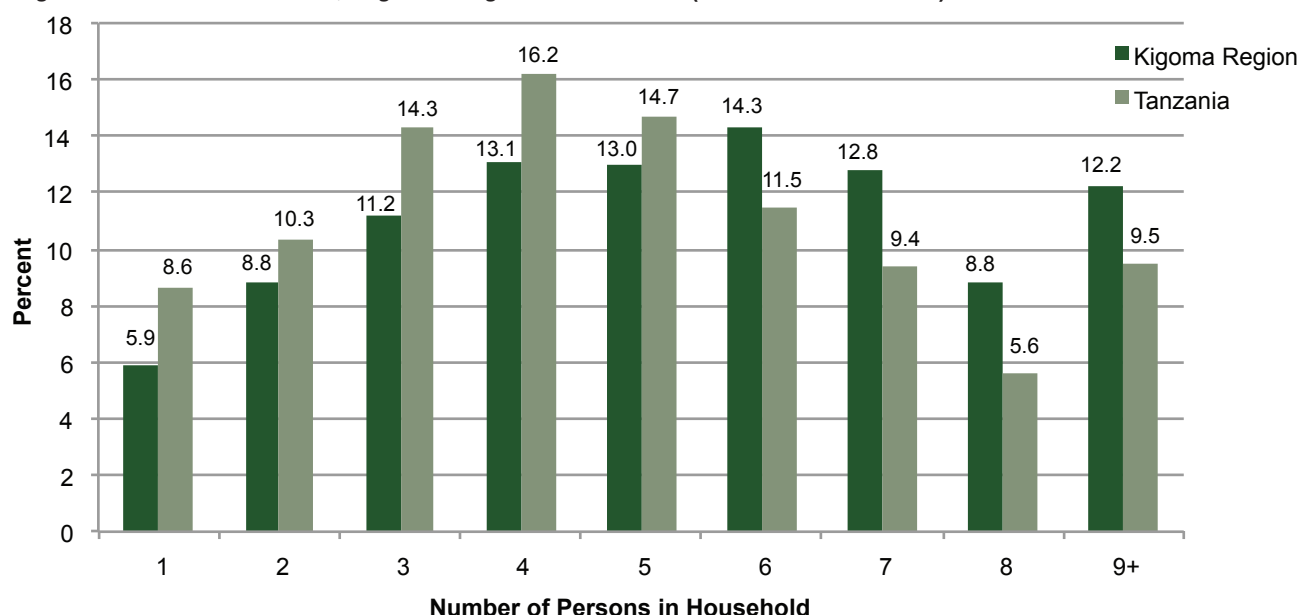
2.1 Household Characteristics

A *household* was defined as a person or group of persons who usually live together in the same dwelling and share food. The Household Questionnaire collected information on household composition, amenities, and goods.

Household Members and Eligible Women

The total population of usual residents within all surveyed households was 20,811, with an average household size of 5.4 persons. Each completed household interview yielded an average of 1.1 women of reproductive age, for a total of 4,091 eligible women. Figure 2.1 shows the distribution of households by number of persons in them, both for Kigoma Region and for Tanzania nationally.¹ Kigoma Region has a much greater percentage of households having six or more residents than Tanzania as a whole (48% vs 36%, respectively). Eighty-one percent of households were in rural areas, according to the National Bureau of Statistics.²

Figure 2.1: Household Size, Kigoma Region vs Tanzania (Percent Distribution)



Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

Figure 2.2 shows the age and sex distribution of the Kigoma Region population. The wide base of the pyramid indicates a large number of children relative to the number of adults in the population, normally an indication of high recent fertility. There are large differences in the percentages of women aged 10-14 years compared with those aged 15-19 years, as well as those aged 45-49 years compared with those aged 50-54 years. This may be due to age displacement, a phenomenon in surveys of women of reproductive age whereby interviewers may misclassify respondents' ages just outside of reproductive age categories (e.g., 10-14 and 50-54 years instead of 15-49 years) to reduce interviewer workloads. To correct for age displacement, all woman-level analyses have been weighted so that the distribution of the sample by age groups is the same as the age distribution of Kigoma women of reproductive age in the 2012 National Census of Population and Housing.²

Figure 2.2: Surveyed Household Population in Kigoma Region, by Age and Sex



Source: 2014 Kigoma Reproductive Health Survey.

Assets

To determine the wealth of households in Kigoma Region, information was collected on dwelling characteristics and household assets (i.e., electricity, paraffin lamp, radio, television, mobile phone, iron, refrigerator, watch, bicycle, motorized vehicle, ownership of a bank account).

Table 2.1 shows the percent distributions of dwelling characteristics collected for each household. Forty-one percent of households had access to protected water (piped, 31.1%; covered well, 10.2%), and the vast majority (93.7%) have access to a latrine (flush/pour toilets, 4%; pit latrine, 89.7%). More than half (57.4%) of households have a cell phone. Ten percent of households in Kigoma have electricity (urban, 31.0%; rural, 5.3%).

Table 2.1: Availability of Basic Household Services, by Urban vs Rural Residence (Percent Distribution)

All Households with Completed Interviews

| Service | Urban (%) | Rural (%) | Total (%) |
|------------------------------|--------------|--------------|--------------|
| Drinking water source | | | |
| Piped | 37.9 | 29.5 | 31.1 |
| Open well | 10.1 | 17.2 | 15.8 |
| Covered well | 11.2 | 10.0 | 10.2 |
| Surface water | 36.0 | 43.0 | 41.6 |
| Other | 4.8 | 0.4 | 1.2 |
| Toilet facility | | | |
| Flush/pour toilet | 16.4 | 1.1 | 4.0 |
| Pit latrine | 80.6 | 91.8 | 89.7 |
| Other | 0.2 | 0.1 | 0.1 |
| None | 2.8 | 7.0 | 6.2 |
| Electricity | | | |
| Yes | 31.0 | 5.3 | 10.1 |
| No | 69.0 | 94.7 | 89.9 |
| Cell phone | | | |
| Yes | 68.0 | 54.9 | 57.4 |
| No | 32.0 | 45.1 | 42.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of households | 753 | 3,085 | 3,838 |

Source: 2014 Kigoma Reproductive Health Survey.

2.2 Characteristics of Respondents

Age

Table 2.2 shows the percent distribution of women interviewed by age at the time of interview. Nearly one quarter (24.1%) of women were in the youngest age group (15-19 years) (urban, 25.8%; rural, 23.7%). Most women (60.3%) were aged 15-29 years (urban, 62.2%; rural, 59.9%), but the proportion of women in each age group decreased with increasing age, again indicating Kigoma's relatively young population composition and high rate of childbearing.

Table 2.2: Characteristics of Selected Women, by Urban vs Rural Residence (Percent Distribution)

Women of Reproductive Age (15-49 Years)

| Characteristic | Kigoma (RHS-2014) | | | | Tanzania (DHS-2010) | |
|------------------------------|-------------------|--------------|--------------|-----------------|---------------------|------------------|
| | Urban (%) | Rural (%) | Total (%) | Number of Women | Total (%) | Number of Women |
| Residence | | | | | | |
| Urban | 100.0 | 0.0 | 19.7 | 808 | 28.5 | 2,892 |
| Rural | 0.0 | 100.0 | 80.3 | 3,108 | 71.5 | 7,247 |
| Age group (yr) | | | | | | |
| 15-19 | 25.8 | 23.7 | 24.1 | 865 | 21.4 | 2,221 |
| 20-24 | 20.2 | 19.8 | 19.9 | 716 | 18.8 | 1,860 |
| 25-29 | 16.2 | 16.4 | 16.3 | 637 | 16.5 | 1,613 |
| 30-34 | 13.1 | 13.2 | 13.2 | 525 | 14.0 | 1,389 |
| 35-39 | 10.9 | 11.4 | 11.3 | 487 | 12.7 | 1,249 |
| 40-44 | 8.0 | 9.0 | 8.8 | 416 | 9.2 | 983 |
| 45-49 | 5.9 | 6.6 | 6.4 | 270 | 7.3 | 824 |
| Education level | | | | | | |
| No education | 15.8 | 26.9 | 24.7 | 958 | 19.1 | 1,940 |
| Some primary | 16.2 | 16.7 | 16.6 | 627 | 14.6 | 1,482 |
| Completed primary | 46.1 | 49.1 | 48.5 | 1,926 | 50.0 | 5,071 |
| Attended secondary or higher | 21.9 | 7.3 | 10.2 | 405 | 16.2 | 1,646 |
| Swahili literacy | | | | | | |
| Illiterate | 21.9 | 33.1 | 30.9 | 1,196 | 27.4 | N/A |
| Partially literate | 5.0 | 8.0 | 7.4 | 288 | 5.3 | N/A |
| Literate | 73.0 | 59.0 | 61.7 | 2,432 | 67.0 ^a | N/A |
| Current union status | | | | | | |
| Married | 46.7 | 49.5 | 48.9 | 1,974 | 58.3 | 5,917 |
| In union | 10.5 | 15.8 | 14.8 | 570 | 5.0 | 393 |
| Widowed | 2.4 | 2.1 | 2.2 | 92 | 2.9 | 255 |
| Divorced | 1.3 | 1.0 | 1.1 | 46 | 8.8 ^b | 856 ^b |
| Separated | 5.7 | 4.9 | 5.1 | 206 | | |
| Never in union | 33.3 | 26.7 | 28.0 | 1,028 | 25.1 | 2,718 |
| Total | 100.0 | 100.0 | 100.0 | 3,916 | 100.0 | 10,139 |

Abbreviations: DHS-2010, 2010 Tanzania Demographic and Health Survey; RHS-2014, 2014 Kigoma Reproductive Health Survey.

Sources: DHS-2010, RHS-2014.

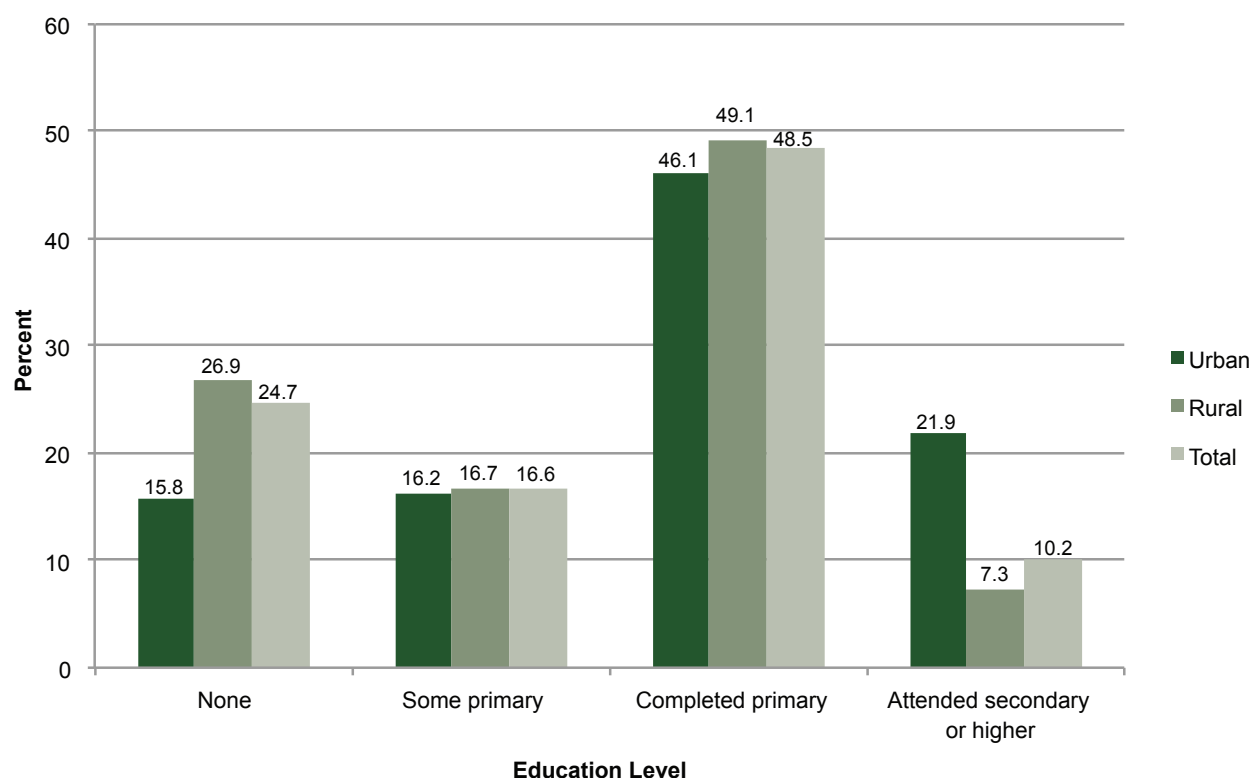
^a Includes women who attended secondary school or higher (assumed literate), as well as women who attended up to primary school and who could read a whole sentence.

^b Divorced/separated.

Education and Literacy

Nearly half (48.5%) of women reported that primary school was the highest level of school they completed (urban, 46.1%; rural, 49.1%), and 24.7% reported that they had received no formal education (urban, 15.8%; rural, 26.9%) (Table 2.2, Figure 2.3). A larger proportion of women in urban areas (21.9%) had attended secondary school or higher than had women in rural areas (7.3%).

Figure 2.3: Educational Attainment of Women Aged 15-49 Years, by Urban/Rural Residence—Kigoma Region (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

Literacy was determined by assessing each woman's ability to read all, some, or none of a Swahili sentence. About 62% of women were Swahili literate (urban, 73.0%; rural, 59.0%), 31% were illiterate (urban, 21.9%; rural, 33.1%), and 7.4% were partially literate (urban, 5.0%; rural, 8.0%) (Table 2.2).

Partnership Status

For the 2014 Kigoma Reproductive Health Survey, women who were *in union* with a man were in a steady relationship with a man, either married via legal or customary matrimony, or living together as if married.

Sixty-four percent of women were in union at the time of the interview (married, 48.9%; unmarried, 14.8%), 8.4% had previously been in union with a man (widowed, 2.2%; divorced, 1.1%; separated, 5.1%), and 28.0% had never been in union with a man (Table 2.2). A greater proportion of women in rural areas (65.3%) were currently in union with a man (married, 49.5%; unmarried, 15.8%) than were those living in urban areas (57.2% [married, 46.7%; unmarried, 10.5%]).

Wealth

An index of relative wealth was created using principal components analysis, which assigned a weight to each household asset and dwelling characteristic. Each household received an asset score comprising the total of the asset weights in that household. Each household member was assigned the weighted asset score of the household. Based on this score, all individuals in the sample were then ranked and divided into three wealth terciles: low, middle, and high. A designation of *high* wealth, therefore, did not indicate being a wealthy household; rather, it meant that the household had a higher asset score than households classified as having *low* and *middle* wealth.

Table 2.3 shows the results of the relative wealth classification for all women interviewed. A greater percentage of women in urban households were classified in the high wealth tercile, whereas more women in rural households were classified in the low or middle wealth terciles.

Table 2.3: Relative Socioeconomic Classification (in Terciles) of Selected Women, by Urban vs Rural Residence (Percent Distribution)

Women of Reproductive Age (15–49 Years)

| Characteristic | Urban (%) | Rural (%) | Total (%) | Number of Women |
|-----------------------|--------------|--------------|--------------|-----------------|
| Wealth tercile | | | | |
| Low | 17.9 | 35.1 | 31.7 | 1,235 |
| Middle | 16.7 | 37.5 | 33.4 | 1,277 |
| High | 65.4 | 27.5 | 34.9 | 1,404 |
| Total | 100.0 | 100.0 | 100.0 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

Economic Empowerment Index

An index of economic empowerment of women of reproductive age was created using a set of five questions³ inquiring whether the respondent had received money or goods for work outside the home (or outside of household chores), had her own cash savings, owned land, or owned any other assets that could generate income. Table 2.4 shows that one-third (32.8%) of these women earned money for work outside the home; 2.9% were paid in goods for work outside the home; 11.1% had individual cash savings; 25.4% owned land; and 14.5% owned income-generating assets.

The women's economic empowerment index was then assessed by tallying answers to the five questions described above, so that each *yes* answer scored 1 point. A respondent's economic empowerment index score was the sum of those points (0-5), and a high score implied a respondent's greater control over assets. Table 2.4 shows the distribution of the summary score by urban/rural residence. Scores of 5 were so rare that they were combined with the scores of 4. Scores were generally similar between urban and rural populations, with the majority (76.1%) of respondents demonstrating scores of only 1 or 0.

Table 2.4: Components of Economic Empowerment Index, by Urban vs Rural Residence (Percent)

Women of Reproductive Age (15–49 Years)

| | Urban (%) | Rural (%) | Total (%) |
|---|------------|--------------|--------------|
| Indicator | | | |
| Received money for work outside home (last 12 months) | 38.2 | 31.5 | 32.8 |
| Received goods for work outside home (last 12 months) | 3.9 | 2.7 | 2.9 |
| Has her own cash savings | 17.4 | 9.5 | 11.1 |
| Owns land | 17.5 | 27.3 | 25.4 |
| Has assets that could help her generate income | 13.0 | 14.9 | 14.5 |
| Economic empowerment index | | | |
| 0 | 46.9 | 48.0 | 47.8 |
| 1 | 28.2 | 28.4 | 28.3 |
| 2 | 15.5 | 15.7 | 15.7 |
| 3 | 6.7 | 5.6 | 5.8 |
| 4-5 | 2.6 | 2.2 | 2.3 |
| Number of women | 808 | 3,108 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

Household Decision Making

To measure women's autonomy, a household decision-making index was created.⁴ Women reported which member of the household was usually responsible for six possible decisions: the respondent's health care, large household purchases, household purchases for daily needs, how to use the money that the respondent brought into the household, how to use the money that her partner brought into the household, and whether the respondent was allowed to work to earn money. Women could indicate one of six possible decision makers for each decision: respondent only, husband/partner only, both respondent and husband/partner, husband/partner's parents, respondent's parents, or someone else.

In addition, a score of 1 was assigned to each decision the respondent made herself or jointly with her husband/partner. The household decision-making index created a cumulative score (0-6) for the six decisions, where a low score (0) indicated less empowerment, and a high score (6) indicated greater empowerment within the household.

Table 2.5 demonstrates the distribution of women by this index. Interestingly, greater percentages of women scored either 6 (17.4%) or 0 (16.8%). More rural women than urban women scored 0 or 1 (29.0% and 20.5%, respectively). More urban women than rural women scored mid-to-high (2-5) (62.2% and 53.6%, respectively).

Table 2.5: Household Decision-Making Index: Scale 0 (Low) to 6 (High), by Selected Characteristics (Percent Distribution)

Women in Union Aged 15-49 Years

| Characteristic | Household Decision-Making Score (%) | | | | | | | | Number of Women |
|------------------------------|-------------------------------------|------|------|------|------|------|------|-------|-----------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | Total | |
| Residence | | | | | | | | | |
| Urban | 12.5 | 8.0 | 15.3 | 16.7 | 13.2 | 17.0 | 17.4 | 100.0 | 475 |
| Rural | 17.7 | 11.3 | 13.6 | 13.8 | 12.8 | 13.4 | 17.3 | 100.0 | 2,069 |
| Age group (yr) | | | | | | | | | |
| 15-19 | 27.1 | 14.8 | 13.5 | 8.4 | 7.3 | 6.8 | 22.1 | 100.0 | 146 |
| 20-24 | 19.1 | 14.1 | 13.9 | 12.9 | 11.3 | 12.2 | 16.6 | 100.0 | 440 |
| 25-29 | 16.1 | 13.5 | 14.7 | 16.5 | 13.8 | 12.2 | 13.2 | 100.0 | 534 |
| 30-34 | 17.2 | 7.2 | 16.0 | 16.0 | 14.6 | 13.1 | 15.9 | 100.0 | 437 |
| 35-39 | 14.5 | 8.7 | 12.6 | 16.7 | 12.5 | 17.9 | 17.0 | 100.0 | 416 |
| 40-44 | 12.9 | 7.4 | 14.3 | 11.7 | 14.3 | 17.3 | 22.1 | 100.0 | 348 |
| 45-49 | 14.1 | 8.4 | 9.9 | 11.8 | 13.4 | 19.1 | 23.3 | 100.0 | 223 |
| Education level | | | | | | | | | |
| No education | 23.1 | 12.4 | 11.8 | 12.8 | 11.3 | 10.9 | 17.6 | 100.0 | 741 |
| Some primary | 15.4 | 11.8 | 12.7 | 16.6 | 13.1 | 17.3 | 13.1 | 100.0 | 373 |
| Completed primary | 14.3 | 10.0 | 15.9 | 14.7 | 13.8 | 14.9 | 16.4 | 100.0 | 1,280 |
| Attended secondary or higher | 9.2 | 5.3 | 11.0 | 12.2 | 12.6 | 14.2 | 35.4 | 100.0 | 150 |
| Total | 16.8 | 10.7 | 13.9 | 14.3 | 12.9 | 14.0 | 17.4 | 100.0 | 2,544 |

Source: 2014 Kigoma Reproductive Health Survey.

The percentage of women with low scores decreased with increasing age. The greatest percentage of women in the two youngest age groups scored low (0), whereas the greatest percentage of women in the two oldest age groups scored high (6). The percentage of women with low scores (0 or 1) also decreased with rising education level. The percentage of women scoring 6 increased sharply with secondary education or more (attended secondary or higher, 35.4%; all other education levels, 13.1%-17.6%).

Access to Media and Communication

To assess exposure to media, respondents were asked how often they listened to the radio or watched television in a typical week. Table 2.6 shows that 33.8% of women of reproductive age listened to the radio almost every day (urban, 39.5%; rural, 33.8%), whereas 33.5% did not listen to the radio at all (urban, 26.7%; rural, 35.2%). The majority (81.7%) did not watch television at all. Owning a mobile phone can increase access to health education and to health care and financial services. One-third (33.4%) of women of reproductive age owned a mobile phone, though this proportion differed by residence (urban, 48.3%; rural, 29.7%).

Table 2.6: Media Access and Religious Service Attendance, by Urban vs Rural Residence (Percent Distribution)

Women of Reproductive Age (15-49 Years)

| Characteristic | Urban (%) | Rural (%) | Total (%) | Number of Women |
|--------------------------------------|--------------|--------------|--------------|-----------------|
| Listens to radio | | | | |
| Almost every day | 39.5 | 32.4 | 33.8 | 1,355 |
| At least once a week | 24.4 | 20.6 | 21.3 | 812 |
| Less than once a week | 9.4 | 11.8 | 11.3 | 436 |
| Not at all | 26.7 | 35.2 | 33.5 | 1,313 |
| Watches TV | | | | |
| Almost every day | 21.0 | 1.5 | 5.3 | 226 |
| At least once a week | 11.7 | 6.7 | 7.7 | 291 |
| Less than once a week | 5.5 | 5.3 | 5.3 | 204 |
| Not at all | 61.8 | 86.6 | 81.7 | 3,195 |
| Personal cell phone ownership | | | | |
| Yes | 48.3 | 29.7 | 33.4 | 1,352 |
| No | 51.7 | 70.3 | 66.6 | 2,564 |
| Religious service attendance | | | | |
| At least daily | 12.2 | 12.5 | 12.4 | 498 |
| At least weekly | 75.3 | 70.4 | 71.3 | 2,785 |
| At least monthly | 3.1 | 4.6 | 4.3 | 171 |
| Occasionally | 2.4 | 2.6 | 2.6 | 101 |
| None | 6.7 | 9.9 | 9.3 | 358 |
| Refused | a | a | a | 3 |
| Total | 100.0 | 100.0 | 100.0 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Fewer than 25 cases.

Participation in Religious Services

Participation in religious activities outside the home can facilitate information-sharing within communities. Table 2.6 shows that 83.7% of women of reproductive age in Kigoma Region attended religious services at least weekly. Slightly more urban women attended at least daily or weekly (87.5%) than did rural women (82.9%). Only 9.3% did not attend any religious services.

2.3 Characteristics of Births Since January 2009

Mothers' Characteristics

Table 2.7 shows maternal characteristics for births since January 2009. As most selected households were located in rural areas, the majority of births (84.2%) occurred among women residing in rural areas. Fifteen percent of births were to women younger than age 20 at the time of birth (Figure 2.4). Nearly half of births occurred among women who completed only primary education (47.6%), and almost one-third (32.5%) of births occurred among women with no education. Fifteen percent of births during this period occurred among women who completed only up to some primary education, and 4.5% occurred among women who attended secondary school or more.

Table 2.7: All Births (Live Births/Stillbirths) Occurring Since January 2009, by Selected Characteristics (Percent Distribution)

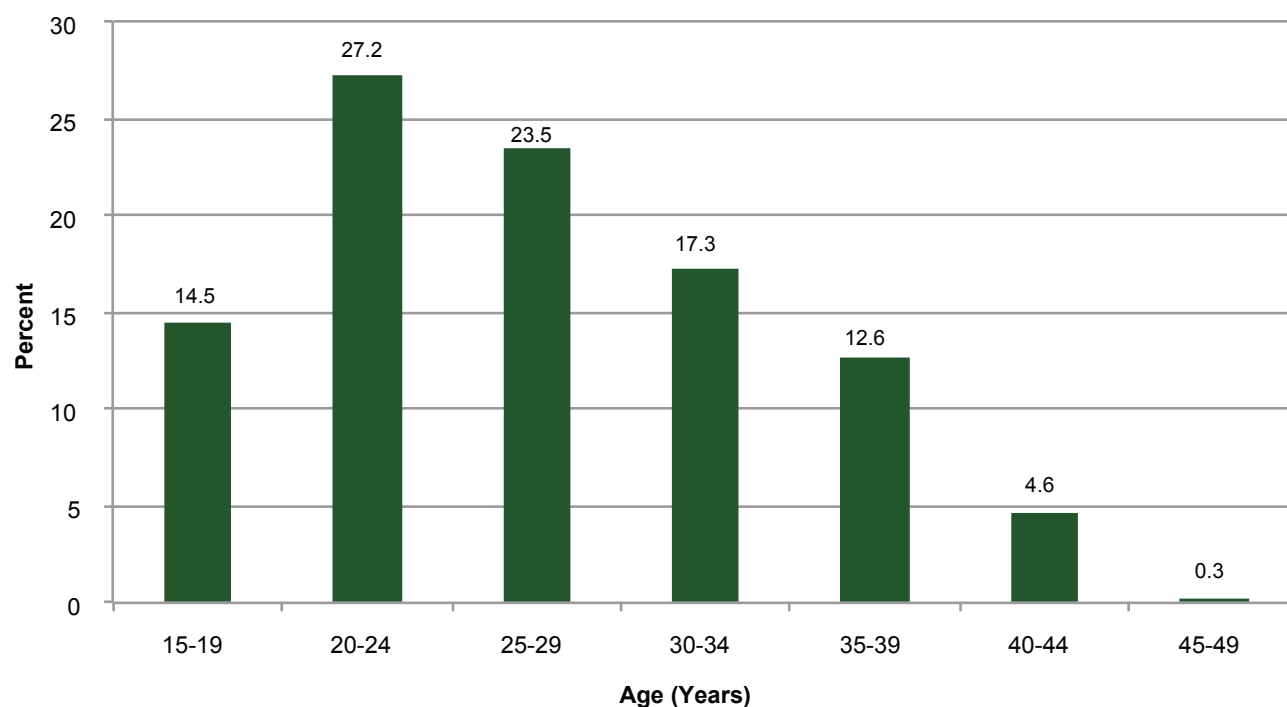
Births to Women Aged 15-49 Years Since January 2009

| Characteristic | Urban (%) | Rural (%) | Total (%) | Number of Births |
|------------------------------|--------------|--------------|--------------|------------------|
| Residence | | | | |
| Urban | 100.0 | 0.0 | 15.8 | 671 |
| Rural | 0.0 | 100.0 | 84.2 | 3,450 |
| Mother's age at birth | | | | |
| 15-19 | 16.2 | 14.2 | 14.5 | 535 |
| 20-24 | 26.7 | 27.3 | 27.2 | 1,062 |
| 25-29 | 25.5 | 23.1 | 23.5 | 960 |
| 30-34 | 17.1 | 17.4 | 17.3 | 746 |
| 35-39 | 10.7 | 12.9 | 12.6 | 586 |
| 40-44 | 3.6 | 4.8 | 4.6 | 217 |
| 45-49 | 0.2 | 0.4 | 0.3 | 15 |
| Education level | | | | |
| No education | 18.9 | 35.0 | 32.5 | 1,316 |
| Some primary | 19.7 | 14.6 | 15.4 | 617 |
| Completed primary | 48.1 | 47.5 | 47.6 | 1,999 |
| Attended secondary or higher | 13.3 | 2.9 | 4.5 | 189 |
| Wealth tercile | | | | |
| Low | 22.9 | 38.8 | 36.3 | 1,486 |
| Middle | 19.5 | 38.8 | 35.7 | 1,472 |
| High | 57.6 | 22.4 | 28.0 | 1,163 |
| Birth order | | | | |
| 1 | 23.9 | 18.7 | 19.5 | 755 |
| 2 | 18.4 | 15.6 | 16.1 | 631 |
| 3 | 17.0 | 14.7 | 15.0 | 604 |
| 4 | 13.9 | 13.0 | 13.1 | 545 |
| 5 | 9.0 | 10.5 | 10.3 | 435 |
| 6 | 6.8 | 8.9 | 8.6 | 372 |
| 7 | 5.0 | 7.1 | 6.8 | 297 |
| 8 | 3.0 | 5.6 | 5.2 | 230 |
| 9 | 2.2 | 3.1 | 3.0 | 136 |
| 10+ | 0.9 | 2.7 | 2.5 | 116 |
| Year of birth | | | | |
| 2009 | 17.2 | 16.4 | 16.5 | 695 |
| 2010 | 17.7 | 16.7 | 16.9 | 708 |
| 2011 | 14.4 | 17.2 | 16.8 | 697 |
| 2012 | 17.9 | 17.6 | 17.6 | 726 |
| 2013 | 19.6 | 18.3 | 18.5 | 746 |
| 2014 ^a | 13.2 | 13.8 | 13.7 | 549 |
| Total | 100.0 | 100.0 | 100.0 | 4,121 |

Source: 2014 Kigoma Reproductive Health Survey.

^a January-September only.

Figure 2.4: Mother's Age at Time of Birth, All Births (Live Births/Stillbirths) Since January 2009 (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

Birth Order

Table 2.8 demonstrates the distribution of births by birth order and characteristics of the mother. Overall, 19.5% of births were first births and nearly half (49.4%) were fourth or higher order births. A high birth order (fourth or higher) was significantly less common among women who attended secondary school or higher (6.4% for women with secondary or higher versus 46.4%-57.1% for women with less education).

Table 2.8: Birth Order of All Births (Live Births/Stillbirths) Since January 2009, by Mothers' Characteristics (Percent Distribution)

Births to Women Aged 15-49 Years Since January 2009

| Characteristic | Birth Order (%) | | | | | Number of Births |
|------------------------------|-----------------|------|------|------|-------|------------------|
| | 1 | 2 | 3 | 4+ | Total | |
| Residence | | | | | | |
| Urban | 23.9 | 18.4 | 17.0 | 40.7 | 100.0 | 671 |
| Rural | 18.7 | 15.6 | 14.7 | 51.0 | 100.0 | 3,450 |
| Education level | | | | | | |
| No education | 12.4 | 14.1 | 16.4 | 57.1 | 100.0 | 1,316 |
| Some primary | 20.5 | 19.3 | 13.9 | 46.4 | 100.0 | 617 |
| Completed primary | 20.6 | 15.6 | 14.7 | 49.1 | 100.0 | 1,999 |
| Attended secondary or higher | 56.1 | 24.1 | 13.3 | 6.4 | 100.0 | 189 |
| Wealth tercile | | | | | | |
| Low | 19.0 | 16.2 | 15.0 | 49.8 | 100.0 | 1,486 |
| Middle | 17.7 | 16.1 | 15.9 | 50.3 | 100.0 | 1,472 |
| High | 22.6 | 15.9 | 13.9 | 47.6 | 100.0 | 1,163 |
| Total | 19.5 | 16.1 | 15.0 | 49.4 | 100.0 | 4,121 |

Source: 2014 Kigoma Reproductive Health Survey.

References

1. The United Republic of Tanzania National Bureau of Statistics (NBS), ORC Macro. *Tanzania Demographic and Health Survey 2010*. Dar es Salaam, Tanzania: National Bureau of Statistics, ORC Macro; 2011.
2. NBS, Office of Chief Government Statistician. *Population Distribution by Age and Sex*. Dar es Salaam and Zanzibar, Tanzania: NBS, Office of Chief Government Statistician; 2013.
3. CARE USA. *Women's Empowerment: Multidimensional Evaluation of Agency, Social Capital & Relations (WE- MEASR): a Tool to Measure Women's Empowerment in Sexual, Reproductive and Maternal Health Programs*. Atlanta, GA: CARE USA; 2014, p. 14.
4. CARE USA. *Women's Empowerment: Multidimensional Evaluation of Agency, Social Capital & Relations (WE- MEASR): a Tool to Measure Women's Empowerment in Sexual, Reproductive and Maternal Health Programs*. Atlanta, GA: CARE USA; 2014, pp. 20-22.

CHAPTER 3: FERTILITY

Chapter 3 provides an overview of fertility levels and differentials for population subgroups within the Kigoma Region and considers future fertility preferences of reproductive age women. For selected indicators, the Kigoma Region was compared with Tanzania as a whole using data from the 2010 Tanzania Demographic and Health Survey (DHS).

Data on fertility were collected in several ways. Each woman interviewed was asked about the number of children who live with her, the number of children who live somewhere else, and the number who were born alive but later died. Together, these answers provide the number of live births each woman ever had. A complete pregnancy history for every woman was then recorded, which included all pregnancies, regardless of outcome (live births, stillbirths, multiple births, miscarriages/abortions, and ectopic pregnancies). For each pregnancy, information was recorded on the outcome, date of outcome, and duration of the pregnancy. For live births, additional information was recorded on sex of the child, whether the child was alive, and age at death for those children who had died.

Fertility is conventionally defined in terms of live births per woman, and stillbirths are not included; this convention is used here to calculate fertility levels. There are several tables in this chapter, however, that take into account stillbirths as well as live births.

3.1 Fertility Levels

Fertility during a period of time can be measured using age-specific fertility rate (ASFR), the total fertility rate (TFR), and the general fertility rate (GFR). For this report the 3-year period from August 2011 through July 2014 was used to measure recent fertility. Table 3.1 shows the ASFR, TFR, and GFR for this 3-year period in Kigoma Region for the total population of the region and for population subgroups. The ASFRs give the annual number of live births per 1,000 women in each age group during that period. The TFR expresses the average number of births per woman if a group of women conformed to the observed ASFRs over their reproductive age span (15-49 years). The GFR is defined as the average annual number of births per 1,000 women aged 15-44 years.

The Kigoma TFR was 6.7 live births per woman, which was considerably higher than the national TFR of 5.4, based on the 2010 DHS. There were sizable differences in the TFR for the population characteristics considered. Rural women experienced, on average, almost two more births per woman than did urban women, and women with no education experienced three more births per woman than did women with at least some secondary education. Considering wealth status, women in the highest tercile of households experienced a TFR of 5.3 births per woman compared with 7.5 and 7.3 for the lowest and middle terciles, respectively.

Table 3.1: Age-Specific Fertility Rates, Total Fertility Rate, and General Fertility Rate—August 2011–July 2014
Women Aged 15–49 Years

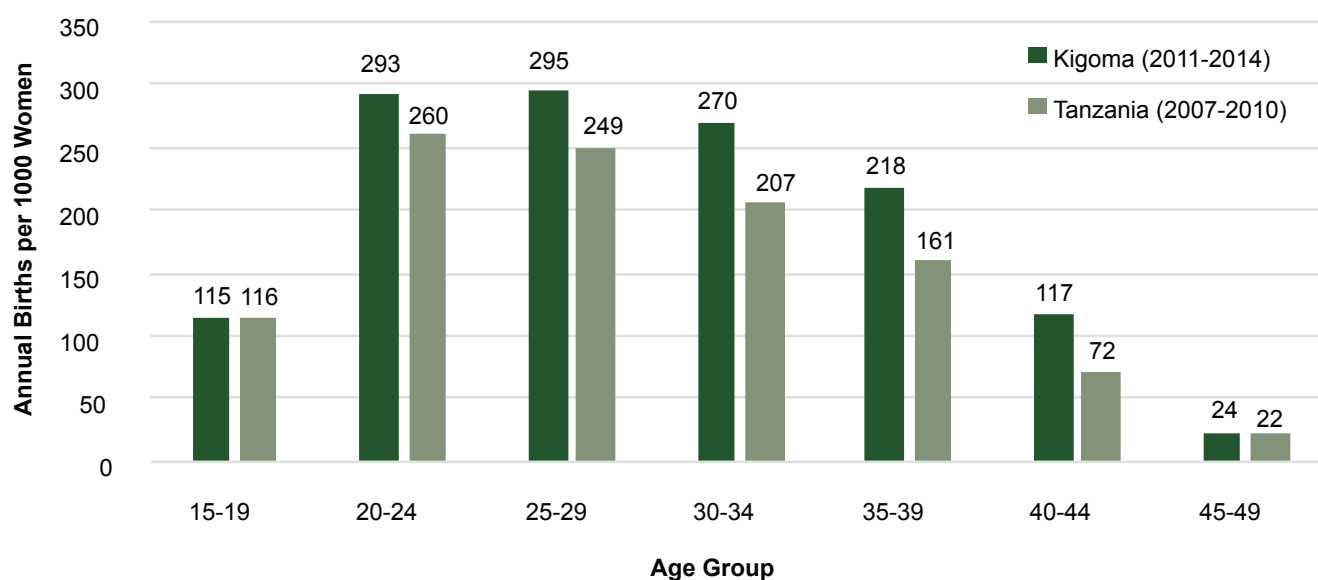
| | Age Group | | | | | | | TFR | Number of Women | GFR |
|------------------------------|-----------|-------|-------|-------|-------|-------|-------|-----|-----------------|-----|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | | |
| Residence | | | | | | | | | | |
| Urban | 105 | 228 | 242 | 192 | 192 | 62 | 6 | 5.1 | 808 | 166 |
| Rural | 117 | 308 | 308 | 290 | 223 | 129 | 28 | 7.0 | 3,108 | 221 |
| Education Level | | | | | | | | | | |
| None | 143 | 335 | 326 | 321 | 233 | 140 | 44 | 7.7 | 958 | 256 |
| Some Primary | 148 | 323 | 282 | 265 | 161 | 127 | 40 | 6.7 | 627 | 215 |
| Completed primary | 112 | 308 | 287 | 252 | 228 | 105 | 11 | 6.5 | 1,926 | 202 |
| Attended secondary or higher | 57 | 165 | 212 | 195 | 174 | 108 | 0 | 4.6 | 405 | 122 |
| Wealth tercile | | | | | | | | | | |
| Low | 150 | 358 | 308 | 293 | 218 | 142 | 26 | 7.5 | 1,235 | 238 |
| Middle | 110 | 323 | 313 | 310 | 239 | 134 | 39 | 7.3 | 1,277 | 228 |
| High | 84 | 211 | 259 | 220 | 197 | 78 | 6 | 5.3 | 1,404 | 167 |
| Total – Kigoma | 115 | 293 | 295 | 270 | 218 | 117 | 24 | 6.7 | 3,916 | 210 |
| Tanzania | 116 | 260 | 249 | 207 | 161 | 72 | 22 | 5.4 | -- | 188 |

Abbreviations: GFR, general fertility rate (annual live births per 1,000 women, 15–44); TFR, total fertility rate (the average number of live births per woman if a group of women conformed to the observed age-specific fertility rates over their reproductive age span).

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

The GFR of 210 births per 1,000 women aged 15–44 years indicates that in 1 year about one-fifth of all reproductive age women had a live birth. This can be compared with the ASFRs, which varied between 22 per 1,000 for women aged 45–49 years and 295 per 1,000 for women aged 25–29 years. With the exceptions of the youngest and oldest age groups, Kigoma Region had notably higher ASFRs than did the country as a whole (Figure 3.1).

Figure 3.1: Age-Specific Fertility Rates for Kigoma (2011–2014) and Tanzania (2007–2010)



Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

Table 3.2 presents the distribution of all women and of currently married women by the number of children ever born, according to 5-year age groups. In addition, it shows the mean number of children ever born per woman and the mean number of children alive per woman in each age group. Overall, 28.6% of all reproductive age women did not report any live births, and only 6.7% of women currently in union had not had any live births. Among women aged 35-49 years, more than 90% had more than two births during their lifetimes. While just 2.7% of women in all age groups reported 10 or more births, almost one-fifth (17.5%) of women aged 45-49 years had 10 or more.

Table 3.2: Number of Children Ever Born (Percent Distribution)
All Women Aged 15-49 Years, and Women in Union Aged 15-49 Years

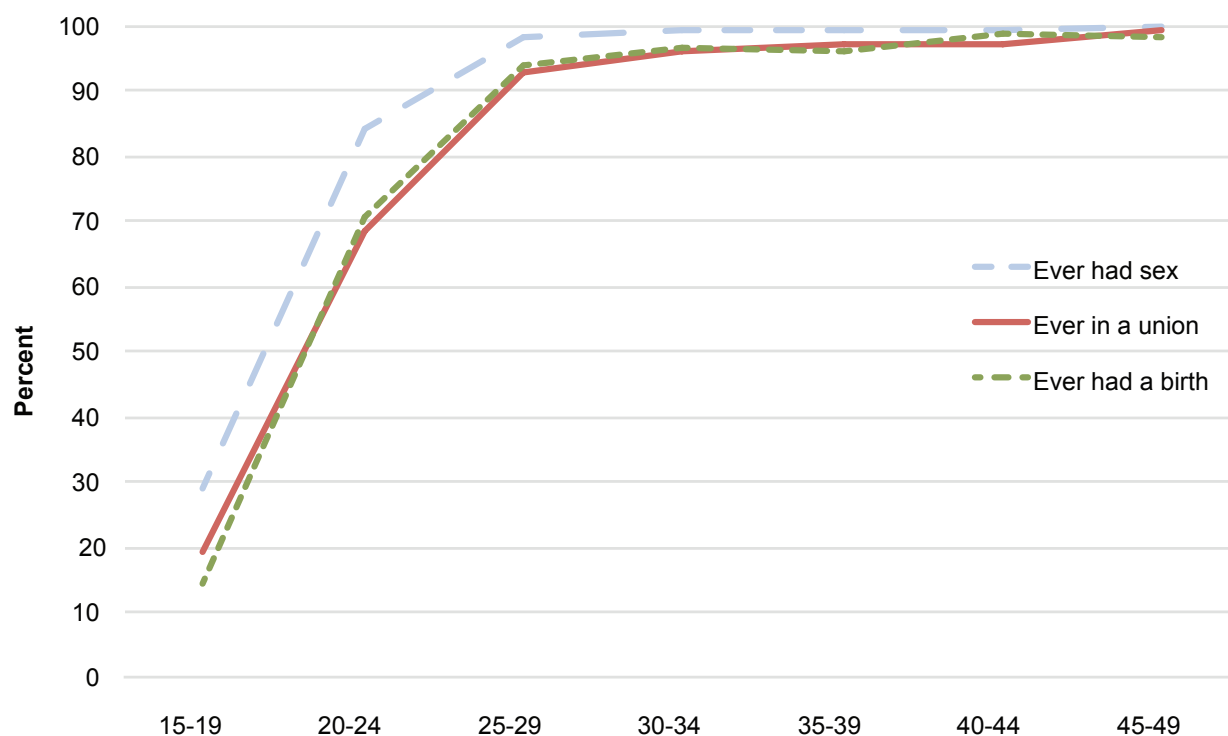
| Age Group | Number of Children Ever Born (%) | | | | | | | | | | | Total | Number of Women | Mean Children Ever Born | Mean Children Surviving |
|--------------------------|----------------------------------|------|------|------|------|------|------|------|------|------|------------|-------|-----------------|-------------------------|-------------------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 or more | | | | |
| All Women | | | | | | | | | | | | | | | |
| 15-19 | 85.9 | 11.7 | 1.9 | 0.4 | . | . | . | . | . | . | . | 100.0 | 865 | 0.17 | 0.16 |
| 20-24 | 29.4 | 33.9 | 22.3 | 11.5 | 2.2 | 0.6 | 0.2 | . | . | . | . | 100.0 | 716 | 1.26 | 1.19 |
| 25-29 | 5.9 | 10.7 | 21.1 | 24.1 | 23.6 | 12.4 | 1.4 | 0.6 | 0.2 | . | . | 100.0 | 637 | 2.96 | 2.75 |
| 30-34 | 3.1 | 4.1 | 6.3 | 17.2 | 19.0 | 21.3 | 15.9 | 8.1 | 2.6 | 2.2 | 0.2 | 100.0 | 525 | 4.45 | 4.05 |
| 35-39 | 3.9 | 1.5 | 4.0 | 7.2 | 12.0 | 14.9 | 18.0 | 17.7 | 14.1 | 3.6 | 3.2 | 100.0 | 487 | 5.63 | 5.08 |
| 40-44 | 1.1 | 1.2 | 3.2 | 4.4 | 5.9 | 10.3 | 14.3 | 18.0 | 14.0 | 13.5 | 14.2 | 100.0 | 416 | 6.89 | 6.11 |
| 45-49 | 1.7 | 0.6 | 2.9 | 4.6 | 6.5 | 10.4 | 11.3 | 13.6 | 15.8 | 15.0 | 17.5 | 100.0 | 270 | 7.11 | 6.02 |
| Total | 28.6 | 12.2 | 10.1 | 10.1 | 9.1 | 8.2 | 6.4 | 5.6 | 4.2 | 2.8 | 2.7 | 100.0 | 3,916 | 3.06 | 2.76 |
| Women Currently in Union | | | | | | | | | | | | | | | |
| 15-19 | 45.9 | 43.3 | 8.8 | 2.0 | . | . | . | . | . | . | . | 100.0 | 146 | 0.67 | 0.62 |
| 20-24 | 11.6 | 36.5 | 31.2 | 16.6 | 3.2 | 0.7 | 0.3 | . | . | . | . | 100.0 | 440 | 1.66 | 1.58 |
| 25-29 | 3.1 | 8.6 | 19.8 | 26.1 | 26.0 | 13.7 | 1.6 | 0.8 | 0.3 | . | . | 100.0 | 534 | 3.17 | 2.95 |
| 30-34 | 1.6 | 1.7 | 5.1 | 15.5 | 19.5 | 24.0 | 17.3 | 9.4 | 3.1 | 2.6 | 0.2 | 100.0 | 437 | 4.76 | 4.35 |
| 35-39 | 2.4 | 1.2 | 3.4 | 5.4 | 10.5 | 15.4 | 19.1 | 18.9 | 15.9 | 4.3 | 3.7 | 100.0 | 416 | 5.93 | 5.35 |
| 40-44 | 0.3 | 1.1 | 2.3 | 2.5 | 4.6 | 9.9 | 15.0 | 18.3 | 15.3 | 14.6 | 16.0 | 100.0 | 348 | 7.20 | 6.42 |
| 45-49 | 2.1 | 0.8 | 1.4 | 3.7 | 6.8 | 10.0 | 10.6 | 11.7 | 17.2 | 15.9 | 19.7 | 100.0 | 223 | 7.32 | 6.19 |
| Total | 6.7 | 12.4 | 12.7 | 13.1 | 12.3 | 11.6 | 8.9 | 7.8 | 6.2 | 4.1 | 4.1 | 100.0 | 2,544 | 4.23 | 3.82 |

Source: 2014 Kigoma Reproductive Health Survey.

The average number of children ever born among 45- to 49-year-olds was 7.1. This is only slightly greater than the TFR of 6.7 derived from recent ASFRs, indicating only a very slight recent decline in fertility for younger cohorts of women.

Figure 3.2 and Table 3.3 illustrate young ages of initiation into sexual activity, entry into marriage, and childbearing. Twenty-nine percent of 15- to 19-year-olds were sexually active, and 14.1% had had at least one birth. By ages 25-29, 98.2% had ever had sex, and 94.1% had ever given birth.

Figure 3.2: Women Who Ever Had Sexual Relations, Were Ever Married, or Ever Had a Birth, by Current Age (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 3.3: Women Who Ever Had Sexual Relations, Ever Were Married, or Ever Had a Birth, by Current Age (Percent)

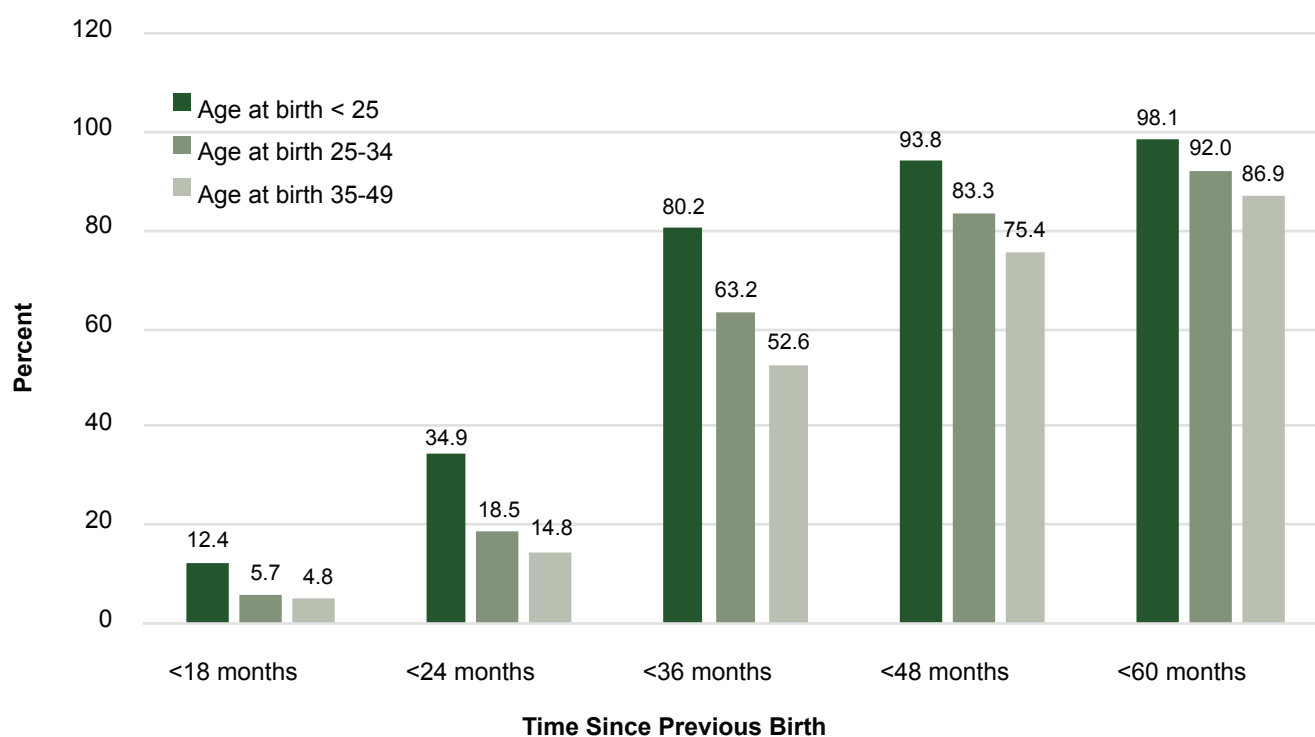
All Women Aged 15-49 Years

| Age Group | Ever Had Sex | Ever Married or in Union | Ever Had a Birth | Number of Women |
|--------------|--------------|--------------------------|------------------|-----------------|
| 15-19 | 29.0 | 19.1 | 14.1 | 865 |
| 20-24 | 84.2 | 68.8 | 70.6 | 716 |
| 25-29 | 98.2 | 92.9 | 94.1 | 637 |
| 30-34 | 99.4 | 96.1 | 96.9 | 525 |
| 35-39 | 99.3 | 97.2 | 96.1 | 487 |
| 40-44 | 99.4 | 97.4 | 98.9 | 416 |
| 45-49 | 100.0 | 99.3 | 98.3 | 270 |
| Total | 79.2 | 72.0 | 71.4 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

Fertility can also be described in terms of the length of time between two births. Research has shown that short birth intervals are associated with subsequent child mortality and poor health status of children. For non-first births that occurred after January 2009 and before the survey in 2014, Table 3.4 shows the percentage of births that occurred within 18, 24, 36, 48, and 60 months of the previous births. Both live births and stillbirths have been included in this analysis. For all of Kigoma Region, 7.4% of births occurred after a very short interval of less than 18 months, and 22.5% occurred less than 24 months after the previous births. A strong relationship exists between mother's age, child's birth order, and the length of the interval before the birth. Thirty-five percent of non-first births to women younger than 25 years occurred within 24 months of the previous birth, compared with just 14.8% of births at ages 35-49 (Figure 3.3). Thirty-one percent of second births occurred within 24 months of the previous birth, compared with just 19.5% of sixth or higher order births. There was little difference in the occurrence of short intervals by mother's education level or household's wealth. The 2010 Tanzania DHS showed that just 15.6% of births nationally occurred after intervals of less than 24 months, compared with 22.5% in Kigoma Region, again reflecting the higher level of fertility there.

Figure 3.3: Births Within 18, 24, 36, 48, and 60 Months of a Previous Birth, by Age of Mother at the Birth, Since January 2009 (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 3.4: Non-First Births Since January 2009, that Occurred Within 18, 24, 36, 48, and 60 Months After the Previous Birth (Percent)^a

Non-First Births Since January 2009

| | Time Since Previous Birth (%) | | | | | Number of Births |
|------------------------------|-------------------------------|------------|------------|------------|------------|------------------|
| | <18 Months | <24 Months | <36 Months | <48 Months | <60 Months | |
| Age at birth | | | | | | |
| < 25 | 12.4 | 34.9 | 80.2 | 93.8 | 98.1 | 887 |
| 25-34 | 5.7 | 18.5 | 63.2 | 83.3 | 92.0 | 1,627 |
| 35-49 | 4.8 | 14.8 | 52.6 | 75.4 | 86.9 | 809 |
| Birth order | | | | | | |
| 2 | 11.4 | 31.0 | 70.3 | 85.1 | 92.5 | 622 |
| 3 | 6.6 | 22.1 | 66.7 | 84.5 | 90.8 | 595 |
| 4 | 7.1 | 22.3 | 66.7 | 86.0 | 93.4 | 541 |
| 5 | 5.7 | 17.7 | 60.9 | 83.8 | 93.0 | 427 |
| 6+ | 6.4 | 19.5 | 64.1 | 84.1 | 93.2 | 1,138 |
| Residence | | | | | | |
| Urban | 7.7 | 21.4 | 53.3 | 74.9 | 86.4 | 516 |
| Rural | 7.4 | 22.7 | 68.1 | 86.4 | 93.7 | 2,807 |
| Education level | | | | | | |
| No education | 6.7 | 24.2 | 69.0 | 86.8 | 93.6 | 1,143 |
| Some primary | 10.6 | 22.7 | 63.5 | 84.6 | 94.5 | 494 |
| Completed primary | 7.0 | 21.4 | 64.6 | 83.4 | 91.5 | 1,604 |
| Attended secondary or higher | 7.8 | 18.3 | 58.5 | 77.6 | 88.2 | 82 |
| Wealth tercile | | | | | | |
| Low | 6.3 | 21.5 | 67.9 | 86.7 | 94.6 | 1,198 |
| Middle | 8.2 | 23.4 | 69.1 | 86.9 | 93.3 | 1,217 |
| High | 7.9 | 22.6 | 58.7 | 78.9 | 89.1 | 908 |
| Total - Kigoma | 7.4 | 22.5 | 65.8 | 84.7 | 92.6 | 3,323 |
| Tanzania | 4.5 | 15.6 | 55.4 | 75.6 | 85.8 | 6,472 |

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

^a Excludes 755 first births and 43 births missing information on previous interval length.

3.2 Fertility Preferences and Planning Status of Previous Pregnancies

Information on fertility preferences provides family planning programs with greater understanding of the potential demand for family planning services. The 2014 Kigoma Reproductive Health Survey included questions about planning status of previous pregnancies, desire to have additional children, preferred waiting time to the next birth, and what women considered the ideal number of children they would like to have.

For each live birth or stillbirth since January 2009, survey respondents were asked, “Just before you got pregnant, did you want to get pregnant then, did you want to get pregnant later, or did you not want to get pregnant then or any time in the future?” Table 3.5 and Figure 3.4 show the percent distribution of births since January 2009 by responses to this question. Because of post hoc rationalization of attitudes with behavior, these results should be interpreted with care. The results do, however, provide insight into the extent to which women are able to control their fertility.

Table 3.5: Planning Status of Births (Percent Distribution)

All Births Since January 2009

| | Planning Status of Birth | | | | Total | Number of Births |
|------------------------------|--------------------------|--------------|----------------|----------|-------|------------------|
| | Wanted Then | Wanted Later | Wanted No More | Not Sure | | |
| Age at birth | | | | | | |
| < 25 | 74.8 | 18.7 | 5.6 | 0.9 | 100.0 | 1,597 |
| 25-34 | 70.1 | 23.8 | 5.1 | 0.9 | 100.0 | 1,706 |
| 35-49 | 67.9 | 21.2 | 10.1 | 0.8 | 100.0 | 818 |
| Birth order | | | | | | |
| 1 | 82.5 | 9.6 | 7.2 | 0.7 | 100.0 | 755 |
| 2 | 74.6 | 20.9 | 3.7 | 0.8 | 100.0 | 631 |
| 3 | 69.3 | 26.5 | 3.4 | 0.8 | 100.0 | 604 |
| 4 | 73.7 | 20.1 | 4.8 | 1.4 | 100.0 | 545 |
| 5 | 66.6 | 27.6 | 5.5 | 0.4 | 100.0 | 435 |
| 6+ | 64.1 | 25.3 | 9.6 | 1.1 | 100.0 | 1,151 |
| Residence | | | | | | |
| Urban | 70.4 | 20.6 | 8.2 | 0.8 | 100.0 | 671 |
| Rural | 71.9 | 21.4 | 5.8 | 0.9 | 100.0 | 3,450 |
| Education level | | | | | | |
| No education | 72.9 | 19.9 | 6.0 | 1.3 | 100.0 | 1,316 |
| Some primary | 71.3 | 22.1 | 6.3 | 0.4 | 100.0 | 617 |
| Completed primary | 71.8 | 21.7 | 5.6 | 0.8 | 100.0 | 1,999 |
| Attended secondary or higher | 63.1 | 23.4 | 13.5 | 0.0 | 100.0 | 189 |
| Wealth tercile | | | | | | |
| Low | 72.8 | 21.1 | 5.4 | 0.7 | 100.0 | 1,486 |
| Middle | 71.2 | 22.6 | 5.5 | 0.7 | 100.0 | 1,472 |
| High | 70.8 | 19.7 | 8.1 | 1.4 | 100.0 | 1,163 |
| Total - Kigoma | 71.7 | 21.2 | 6.2 | 0.9 | 100.0 | 4,121 |
| Tanzania | 73.6 | 22.1 | 3.7 | 0.6 | 100.0 | 9,145 |

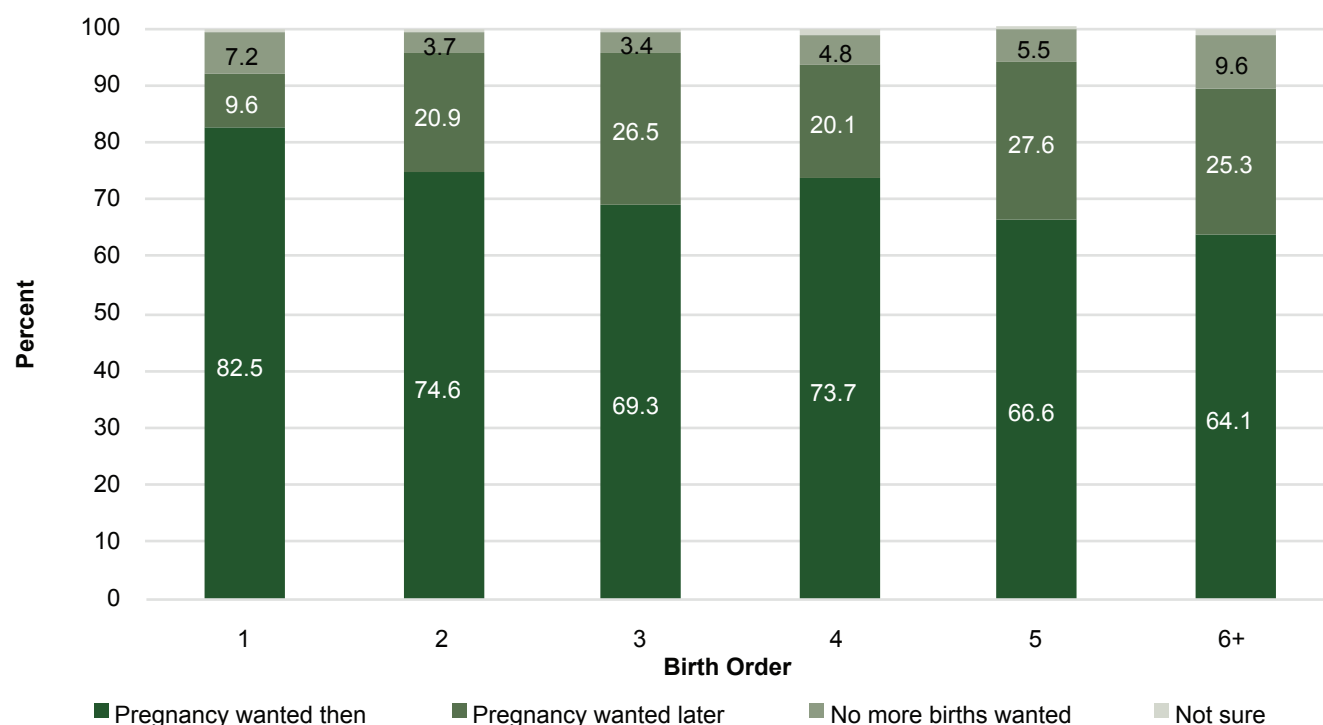
Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

Considering all births during this period of time, 71.7% of women wanted the birth at the time it occurred, 21.2% wanted it later, and just 6.2% did not want it then or later. The results for Kigoma Region were similar to results for all of Tanzania, according to the 2010 DHS (wanted then, 73.6%; wanted later, 22.1%; unwanted, 3.7%). The percentage who wanted no more was greater for women aged 35-49 at the time of the birth (10.1%) than for births before age 25 (5.6%). There was a U-shaped association with birth order; 7.2% of first births were classified as unwanted, compared with just 3.4% of third births and 9.6% of sixth and higher order births. There were no appreciable differences in reported planning status of recent births by area of residence or by wealth status of the household. Women with a secondary or higher level of education were more likely to classify births as not wanted (13.5%) than women with less education (5%-6%).

Table 3.6 shows total wanted and total unwanted fertility rates. These were calculated in the same manner as the TFR, which was labelled “observed TFR,” except that the wanted TFR included just those live births classified as “wanted then” or “wanted later.” The unwanted TFR included only live births classified as “wanted no more.” Overall, the wanted TFR was 6.1, or about half a birth less than the observed TFR of 6.7. The discrepancy between the wanted TFR and the observed TFR was greater for women with less education (no education, 0.7 births for women; attended secondary or higher, 0.3).

Figure 3.4: Planning Status of Births Since January 2009, by Birth Order of the Birth (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

Table 3.6: Total Wanted and Unwanted Fertility Rates During August 2011-July 2014

All Women Aged 15-49 Years

| | All Women Aged 15-49 Years | | | | Women Aged 40-49 Years | |
|------------------------------|----------------------------|--------------|--------------|-----------------|--------------------------------|-----------------|
| | Wanted TFR | Unwanted TFR | Observed TFR | Number of Women | Mean Number Children Ever Born | Number of Women |
| Residence | | | | | | |
| Urban | 4.5 | 0.7 | 5.1 | 808 | 5.9 | 146 |
| Rural | 6.5 | 0.5 | 7.0 | 3,108 | 7.2 | 540 |
| Education level | | | | | | |
| None | 7.1 | 0.7 | 7.7 | 958 | 7.1 | 194 |
| Some Primary | 6.2 | 0.5 | 6.7 | 627 | 7.2 | 94 |
| Completed primary | 6.1 | 0.5 | 6.5 | 1,926 | 7.0 | 381 |
| Attended secondary or higher | 4.2 | 0.3 | 4.6 | 405 | 3.6 | 17 |
| Wealth tercile | | | | | | |
| Low | 7.0 | 0.5 | 7.5 | 1,235 | 7.2 | 224 |
| Medium | 6.8 | 0.6 | 7.3 | 1,277 | 7.3 | 219 |
| High | 4.7 | 0.6 | 5.3 | 1,404 | 6.4 | 243 |
| Total - Kigoma | 6.1 | 0.5 | 6.7 | 3,916 | 7.0 | 686 |
| Tanzania | 4.7 | 0.7 | 5.4 | -- | 6.0 | -- |

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

3.3 Future Fertility Preferences

Table 3.7 presents data on future fertility preferences among women currently married or in an informal union. Survey respondents were asked whether they would like to have any more children and, if they did want more, were asked how long they would like to wait until the birth of another child. Pregnant women were asked if they wanted more children after the current pregnancy and how long they would want to wait after the birth of the child they were expecting. The upper panel classifies women by the number of living children and the lower panel classifies them by current age group. While 69.2% of married women said they wanted additional children, only 10.6% wanted the next birth to occur in less than 2 years.

Table 3.7: Desire for More Children, by Current Number of Living Children and Woman's Age (Percent Distribution)

Women Aged 15-49 Years, Currently Married or in Union

| | Kigoma Region ^a | | | | | | | Total | Tanzania ^b |
|-------------------------------|----------------------------|-------|-------|-------|-------|-------|-----------|-------|-----------------------|
| | Number of Living Children | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 or more | | |
| Desire for more children | | | | | | | | | |
| More soon (<2 years) | 30.1 | 11.8 | 11.7 | 12.2 | 9.8 | 8.4 | 4.5 | 10.6 | 21.3 |
| More later | 54.7 | 74.8 | 69.7 | 62.5 | 53.7 | 49.9 | 23.2 | 51.7 | 43.5 |
| More, unsure when | 9.2 | 8.2 | 6.3 | 7 | 7.9 | 7.3 | 5.2 | 6.9 | 1.2 |
| No more children ^c | 0.6 | 0.3 | 4.2 | 8.6 | 16.2 | 21.4 | 49.1 | 19.4 | 30.0 |
| Unable to get pregnant | 0.6 | 0.5 | 0.6 | 0.5 | 1 | 1.6 | 3.1 | 1.4 | 2.1 |
| God's will/fate | 3.7 | 3.8 | 5.7 | 8.6 | 9.3 | 9.4 | 12.4 | 8.4 | N/A |
| Not sure | 1.1 | 0.6 | 1.8 | 0.6 | 2.1 | 2.1 | 2.5 | 1.7 | 1.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 172 | 316 | 348 | 342 | 356 | 302 | 708 | 2,544 | 6,412 |

| | Age Group | | | | | | | Total | Tanzania ^b |
|-------------------------------|-----------|-------|-------|-------|-------|-------|-------|-------|-----------------------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | | |
| Desire for more children | | | | | | | | | |
| More soon (<2 years) | 17.5 | 9.2 | 11.2 | 9.9 | 13 | 9.5 | 5.8 | 10.6 | 21.3 |
| More later | 68.2 | 76 | 67.4 | 55.7 | 36.1 | 17 | 10.3 | 51.7 | 43.5 |
| More, unsure when | 10.7 | 5.9 | 7.5 | 7.6 | 7.6 | 6.4 | 2.5 | 6.9 | 1.2 |
| No more children ^c | . | 1.7 | 5.3 | 14 | 31.3 | 48.8 | 59.7 | 19.4 | 30.0 |
| Unable to get pregnant | . | 0.2 | 0.2 | 0.4 | 0.6 | 3.4 | 8.8 | 1.4 | 2.1 |
| God's will/fate | 1.9 | 5.6 | 7 | 10.2 | 9.9 | 13.4 | 9.8 | 8.4 | N/A |
| Not sure | 1.6 | 1.3 | 1.5 | 2.3 | 1.3 | 1.5 | 3 | 1.7 | 1.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 146 | 440 | 534 | 437 | 416 | 348 | 223 | 2,544 | 6,412 |

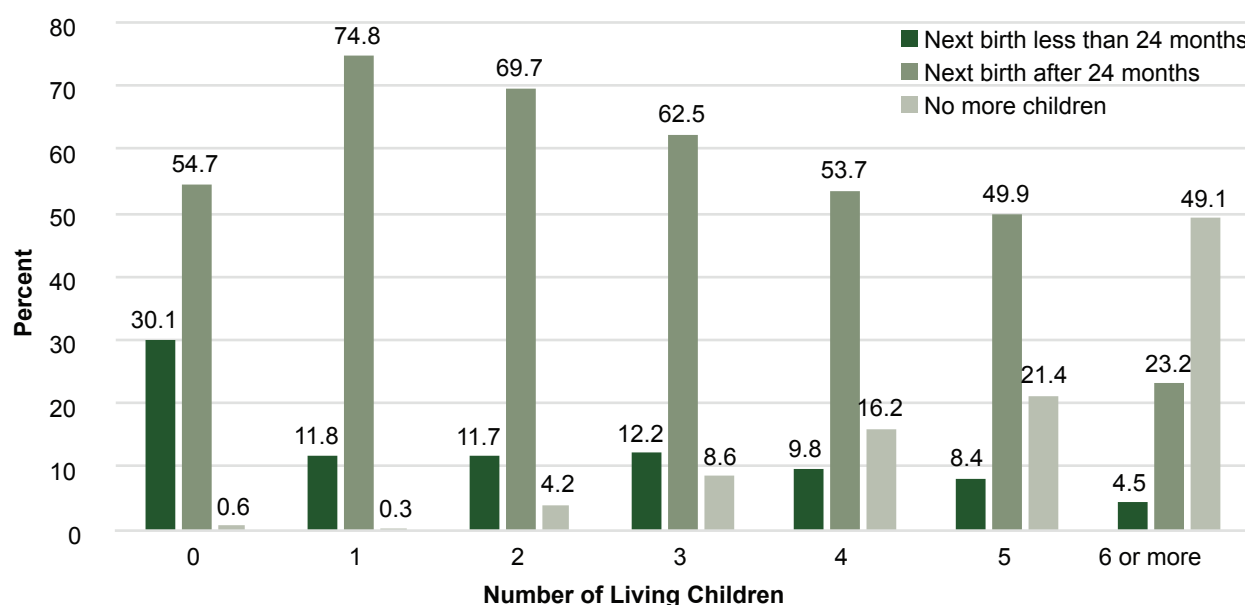
^a 2014 Kigoma Reproductive Health Survey.

^b 2010 Tanzania Demographic and Health Survey.

^c Includes sterilized women.

Nineteen percent of women stated they wanted no more children, 1.4% said they were unable to get pregnant, and 10.1% were not sure or said it was up to fate or God's will. Responses varied considerably by the number of living children and age of the woman. While 30.1% of married women with no living children wanted a birth in the next 2 years, only 4.5% of women with six or more living children wanted a birth soon (Figure 3.5). The percentage of women wanting no more children increased from 8.6% among women with three children to 49.1% among those with six or more. Overall, in Tanzania, 71.8% of women with six or more living children want no more children. Similarly, the percentage of women wanting no more children increased with age from 1.7% among those aged 20-24 years to 59.7% among those aged 45-49 years.

Figure 3.5: Women in Union Who Wanted to Wait Less Than 2 Years vs More Than 2 Years Until Next Birth, by Number of Living Children (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 3.8 details the percentage of women wanting no more children, according to various characteristics (women's residence, education level, and wealth tercile). The percentage of urban and rural women wanting no more children was the same, but it differed by the number of children that urban and rural women had. Among women with the same number of children, a larger percentage of urban women than rural women wanted no more children. This is reflected in the fact that fewer urban women reach higher parities. Furthermore, a threshold of 20% of women wanting no more children differed according to parity and education level: women with no education reached this threshold when they had six or more children, whereas women with some primary education reached this threshold when they had five or more children.

Table 3.8: Women Who Wanted No More Children, by Number of Living Children (Percent)

Women Aged 15-49 Years, Currently Married or in Union

| | Number of Living Children | | | | | | | Total |
|------------------------------|---------------------------|-----|------|------|------|------|-----------|-------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 or more | |
| Residence | | | | | | | | |
| Urban | 0.0 | 0.0 | 4.1 | 10.5 | 28.0 | 33.3 | 55.9 | 19.4 |
| Rural | 0.7 | 0.4 | 4.3 | 8.0 | 13.8 | 19.4 | 48.1 | 19.4 |
| Education level | | | | | | | | |
| No education | 0.0 | 1.5 | 3.9 | 6.9 | 16.1 | 13.7 | 48.5 | 19.2 |
| Some primary | 0.0 | 0.0 | 4.6 | 4.3 | 10.1 | 24.9 | 47.9 | 17.6 |
| Completed primary | 1.2 | 0.0 | 3.5 | 10.1 | 15.9 | 26.5 | 49.5 | 21.1 |
| Attended secondary or higher | 0.0 | 0.0 | 9.1 | a | a | a | a | 9.5 |
| Wealth tercile | | | | | | | | |
| Low | 0.0 | 0.0 | 3.9 | 5.6 | 9.7 | 16.0 | 46.3 | 16.4 |
| Middle | 0.0 | 1.0 | 3.2 | 5.2 | 14.1 | 17.5 | 49.2 | 19.0 |
| High | 1.7 | 0.0 | 5.7 | 15.8 | 25.7 | 35.4 | 52.0 | 23.0 |
| Total - Kigoma | 0.6 | 0.3 | 4.2 | 8.6 | 16.2 | 21.4 | 49.1 | 19.4 |
| Tanzania | 0.7 | 3.4 | 11.3 | 22.5 | 35.4 | 51.9 | 71.8 | 30.0 |

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

^a Fewer than 25 cases.

Women were also asked about their ideal family size. Women without any children were asked how many children they would ultimately like to have; women with living children were asked about the number they would choose if they could start their childbearing over again. Table 3.9 shows the percent distribution of women by their ideal number of children, as well as the percentage of women who already had their ideal family size. Overall, 24.3% of women indicated that their ideal family size consisted of eight or more children. Twenty-one percent responded that it was “up to God” or fate to determine the ideal family size. Six percent of women said their ideal family size was three or fewer children, and only 4.3% felt they had exceeded their ideal number of children. Overall, the average ideal number for Kigoma women was 6.5 children, higher than that of Tanzania as a whole (4.9 children).¹

Table 3.9: Ideal Number of Children, Mean Ideal Number, and Percent Who Had More than Ideal Number, by Number of Living Children^a (Percent Distribution)
Women Aged 15-49 Years

| | Number of Living Children (%) | | | | | | | | | Total |
|--|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-----------|-------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 or More | |
| Ideal number of children | | | | | | | | | | |
| 0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.5 | 1.2 | 0.3 |
| 1 | 0.3 | 0.0 | 0.1 | 0.1 | 0.6 | 0.0 | 0.5 | 0.7 | 0.0 | 0.2 |
| 2 | 1.7 | 1.1 | 1.1 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| 3 | 7.3 | 9.6 | 4.2 | 2.5 | 2.6 | 1.3 | 0.7 | 0.5 | 0.0 | 4.7 |
| 4 | 11.9 | 14.6 | 10.1 | 13.2 | 6.9 | 1.5 | 3.5 | 2.1 | 3.2 | 9.5 |
| 5 | 19.8 | 20.8 | 23.8 | 15.8 | 5.9 | 8.0 | 4.8 | 4.9 | 6.4 | 15.4 |
| 6 | 14.0 | 17.7 | 15.1 | 18.1 | 20.7 | 11.9 | 10.5 | 4.2 | 3.9 | 14.3 |
| 7 | 8.0 | 7.7 | 7.3 | 5.1 | 11.6 | 10.5 | 12.5 | 7.2 | 4.0 | 8.2 |
| 8 or more | 16.5 | 12.7 | 19.6 | 25.9 | 27.8 | 38.2 | 40.9 | 44.1 | 42.2 | 24.3 |
| God's will/fate | 18.0 | 14.5 | 17.9 | 17.9 | 22.5 | 27.4 | 25.6 | 35.7 | 38.1 | 21.0 |
| Not sure | 1.9 | 1.0 | 0.7 | 1.2 | 0.7 | 1.2 | 0.7 | 0.0 | 1.0 | 1.2 |
| Other | 0.2 | 0.3 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of cases | 1,063 | 486 | 435 | 416 | 409 | 337 | 293 | 235 | 242 | 3,916 |
| Mean ideal number ^b | 5.7 | 5.6 | 6.1 | 6.6 | 6.9 | 7.8 | 7.9 | 8.6 | 8.6 | 6.5 |
| Percent with more than ideal number ^b | 0.0 | 0.0 | 0.2 | 0.2 | 5.5 | 4.6 | 14.1 | 19.2 | 35.0 | 4.3 |
| Tanzania mean ideal number ^c | 4.0 | 4.1 | 4.4 | 5.0 | 5.5 | 5.9 | 6.8 | | | 4.9 |

Sources: 2010 Tanzania Demographic and Health Survey, 2014 Kigoma Reproductive Health Survey.

^a 2014 Kigoma Reproductive Health Survey.

^b Does not include women with non-numeric responses.

^c 2010 Tanzania Demographic and Health Survey.

The average ideal number of children increased according to women's actual number of children: women with no children wanted 5.7 children, and women with eight or more children wanted 8.6 children. Less than 5% of women with fewer than six children had exceeded their ideal family size, compared with 35% of women with eight or more children.

Table 3.10 provides more information on the average ideal family size, as well as the percentage of women who had exceeded their ideal family size. There is little difference in either indicator according to area of residence or wealth tercile. The average ideal size decreased with educational attainment, however (no education, 7.2 children; attended secondary or higher, 4.7 children). Additionally, the average ideal number of children increased with women's ages (15-29 years, 6 children; 40-49 years, 8 children).

Table 3.10: Mean Ideal Number of Children and Percentage of All Women Who Have More than Their Ideal Number, by Age

All Women Aged 15-49 Years

| | Average Ideal Number of Children ^a | | | | Percent with More than Ideal Number ^a | | | |
|------------------------------|---|-------|-------|-------|--|-------|-------|-------|
| | Age Group | | | Total | Age Group | | | Total |
| | 15-29 | 30-39 | 40-49 | | 15-29 | 30-39 | 40-49 | |
| Residence | | | | | | | | |
| Urban | 5.3 | 6.4 | 6.9 | 5.7 | 0.5 | 4.3 | 16.2 | 3.2 |
| Rural | 6.2 | 7.3 | 8.3 | 6.7 | 0.7 | 7.8 | 16.4 | 4.6 |
| Education level | | | | | | | | |
| No education | 6.9 | 7.3 | 8.2 | 7.2 | 1.4 | 11.4 | 15.7 | 6.7 |
| Some primary | 6.4 | 7.4 | 8.4 | 6.8 | 0.3 | 3.4 | 12.4 | 2.3 |
| Completed primary | 5.9 | 7.2 | 7.9 | 6.6 | 0.7 | 6.1 | 18.2 | 4.7 |
| Attended secondary or higher | 4.7 | 4.6 | 4.7 | 4.7 | 0.0 | 3.6 | 6.6 | 0.5 |
| Wealth tercile | | | | | | | | |
| Low | 6.5 | 7.7 | 8.3 | 7.0 | 0.3 | 6.7 | 16.8 | 4.1 |
| Middle | 6.2 | 7.3 | 8.3 | 6.7 | 1.0 | 9.3 | 17.7 | 5.1 |
| High | 5.4 | 6.5 | 7.4 | 5.9 | 0.7 | 5.5 | 14.8 | 3.7 |
| Total | 6.0 | 7.1 | 8.0 | 6.5 | 0.7 | 7.1 | 16.4 | 4.3 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Does not include women with non-numeric responses.

In summary, the indicators on planned status of births and ideal numbers of children showed a general agreement between fertility desires and fertility levels. Only 4.3% of women exceeded their ideal number of children. Discrepancies between past behavior and reported preferences occurred only for women who had six or more children. Twenty-one percent of past births were classified as wanted later, and just 6.2% of births were not wanted at all. This could be contrasted with responses to questions about current fertility desires of married women: 19.4% of married women stated they wanted no more children, and 51.7% indicated that they did want more children but preferred to wait at least 2 years before the next birth.

In general, women in Kigoma Region have very high actual and desired fertility, with no indication of strong desires to reduce fertility significantly. However, there was some evidence of desire to increase spacing between births. Chapter 4 addresses the use of contraception to avoid and delay pregnancy. It also includes an analysis of unmet demand for contraception that combines information about contraceptive use with questions about current fertility desires.

Reference

1. The United Republic of Tanzania National Bureau of Statistics, ORC Macro. *Tanzania Demographic and Health Survey 2010*. Dar es Salaam, Tanzania: National Bureau of Statistics, ORC Macro; 2011.

CHAPTER 4: FAMILY PLANNING

Contraceptive use has important and direct control over fertility levels, and using contraception to limit, delay, or space births can have positive effects on the health of both women and children.

4.1 Contraceptive Knowledge

Lack of knowledge about modern methods of contraception is a significant barrier to using family planning services. Women who are not aware of modern contraceptive methods may not know where to obtain them, may not understand how to use them correctly, and are more likely to have an unmet need for family planning than those who have been exposed to this information. Modern contraceptive methods include the long-acting methods of the intrauterine device (IUD), hormonal implants, and sterilization; shorter acting methods such as injectable and oral contraceptives; and barrier methods such as the condom and the diaphragm.

The 2014 Kigoma Reproductive Health Survey (RHS) asked women whether they had heard of 14 specific methods of contraception. Table 4.1 shows that women of reproductive age in Kigoma appeared to be well aware of family planning; virtually all women (96.3%) had heard of at least one modern method of contraception, though fewer (51.1%) were aware of at least one traditional method. The best known methods were oral contraceptives (91.9%), hormonal injectables (91.3%), and male condoms (89.1%). Contraceptive implants were known of by 82.1% of women, while about two-thirds of women were familiar with IUDs (69.2%), female sterilization/tubal ligation (67.4%), and female condoms (63.3%). About half the respondents had heard of male sterilization/vasectomy, but few knew of the diaphragm, contraceptive foam or jelly, lactational amenorrhea, or emergency contraception.

Of the traditional methods, the best known was the rhythm/calendar method (41.7%). Less than a third know of withdrawal (31.8%).

As might be expected, familiarity with each method was greater among women who were in union, but even women not in union had substantial knowledge of many methods. There was still a sizeable gap, however, in knowledge about long-acting reversible methods of contraception; only about half of women who were not in union had heard of the IUD. Emergency contraception was virtually unknown.

Contraceptive knowledge increased with wealth, but the differences were generally small. For injectables and implants, women in the lowest wealth tercile were nearly as knowledgeable as were those in the highest. The greatest gap between the lowest and highest wealth tercile was for the rhythm or calendar method; 53.4% of women in the highest wealth tercile knew of it, compared with 30.6% of those in the lowest.

Although knowledge of contraception was widespread in Kigoma Region, knowledge of most contraceptive methods was slightly lower there than it was nationally (according to the 2010 Tanzania Demographic and Health Survey [DHS]). The exceptions to this were the implant, which was as well known in Kigoma Region as it was elsewhere, and vasectomy, which was known of by almost half of women in Kigoma but by only about a third of women nationally.

Table 4.1: Knowledge of Contraceptive Methods, by Selected Characteristics (Percent)
All Women Aged 15-49 Years

| Knowledge of Contraceptive Methods | | | Contraceptive Methods | | | | | | | | | | | | | | | Number of Women | |
|------------------------------------|-------------|------|-----------------------|-----------|------|------------|---------|------|-------------|---------------|-----------|---------------|------|-----------------------|------------|-------------------------|-------|-----------------|--------|
| Modern | Traditional | Any | Tubal Ligation | Vasectomy | IUD | Injectable | Implant | Pill | Male Condom | Female Condom | Diaphragm | Foam or Jelly | LAM | Rhythm, Calendar, BOM | Withdrawal | Emergency Contraception | Other | | |
| Residence | | | | | | | | | | | | | | | | | | | |
| Urban | 96.3 | 58.1 | 96.3 | 69.2 | 50.8 | 73.0 | 92.4 | 83.0 | 91.5 | 92.1 | 74.8 | 16.6 | 8.7 | 17.2 | 50.7 | 37.1 | 6.2 | 1.7 | 808 |
| Rural | 95.9 | 49.4 | 96.2 | 67.0 | 48.2 | 68.3 | 91.0 | 81.8 | 92.0 | 88.3 | 60.5 | 14.1 | 7.0 | 16.2 | 39.5 | 30.6 | 3.8 | 1.7 | 3,108 |
| Current union status | | | | | | | | | | | | | | | | | | | |
| In union | 97.9 | 55.4 | 98.1 | 75.0 | 57.3 | 79.1 | 96.1 | 89.5 | 95.9 | 91.0 | 66.6 | 18.2 | 8.7 | 18.7 | 43.3 | 37.7 | 4.7 | 1.8 | 2,544 |
| Not in union | 92.7 | 43.6 | 93.0 | 54.1 | 33.6 | 51.9 | 83.0 | 68.9 | 84.8 | 85.8 | 57.4 | 8.4 | 4.9 | 12.5 | 38.9 | 21.5 | 3.5 | 1.5 | 1,372 |
| Education level | | | | | | | | | | | | | | | | | | | |
| No education | 95.1 | 41.7 | 95.4 | 64.7 | 46.0 | 67.8 | 90.4 | 82.0 | 91.4 | 85.9 | 54.3 | 10.6 | 4.2 | 12.2 | 30.2 | 27.3 | 2.3 | 1.2 | 958 |
| Some primary | 92.5 | 41.4 | 93.3 | 59.6 | 39.2 | 60.0 | 86.3 | 75.0 | 87.2 | 84.1 | 55.9 | 11.2 | 6.2 | 13.8 | 31.5 | 26.6 | 3.3 | 1.6 | 627 |
| Completed primary | 97.5 | 54.4 | 97.6 | 71.4 | 53.1 | 72.4 | 93.5 | 84.8 | 93.6 | 91.6 | 66.9 | 16.9 | 8.3 | 18.0 | 44.9 | 34.3 | 4.6 | 1.7 | 1,926 |
| Attended secondary or higher | 96.5 | 73.9 | 96.9 | 68.0 | 49.8 | 72.8 | 90.9 | 80.7 | 92.7 | 93.2 | 80.1 | 19.2 | 12.0 | 23.2 | 71.2 | 39.8 | 8.9 | 3.1 | 405 |
| Wealth tercile | | | | | | | | | | | | | | | | | | | |
| Low | 95.0 | 40.4 | 95.4 | 64.3 | 44.7 | 64.3 | 89.8 | 80.6 | 90.9 | 85.6 | 56.3 | 12.8 | 6.0 | 14.1 | 30.6 | 24.2 | 2.4 | 1.2 | 1,235 |
| Middle | 96.1 | 51.0 | 96.5 | 67.0 | 49.9 | 69.3 | 91.8 | 82.1 | 92.3 | 89.3 | 63.5 | 13.6 | 6.8 | 15.1 | 39.6 | 33.4 | 4.3 | 1.6 | 1,277 |
| High | 96.8 | 60.8 | 96.8 | 70.6 | 51.2 | 73.7 | 92.2 | 83.4 | 92.4 | 92.1 | 69.5 | 17.3 | 9.0 | 19.7 | 53.8 | 37.3 | 5.9 | 2.2 | 1,404 |
| Total | 96.0 | 51.1 | 96.3 | 67.4 | 48.7 | 69.2 | 91.3 | 82.1 | 91.9 | 89.1 | 63.3 | 14.6 | 7.3 | 16.4 | 41.7 | 31.8 | 4.3 | 1.7 | 3,916 |
| Tanzania | 97.9 | 67.1 | 98.0 | 83.4 | 37.2 | 72.5 | 94.5 | 81.8 | 96.1 | 94.5 | 72.5 | 8.3 | 9.3 | 32.8 | 54.3 | 49.9 | 11.8 | 11.3 | 10,139 |

Abbreviations: BOM, Billings Ovulation Method; DHS-2010, 2010 Tanzania Demographic and Health Survey; IUD, intrauterine device; LAM, lactational amenorrhea method.

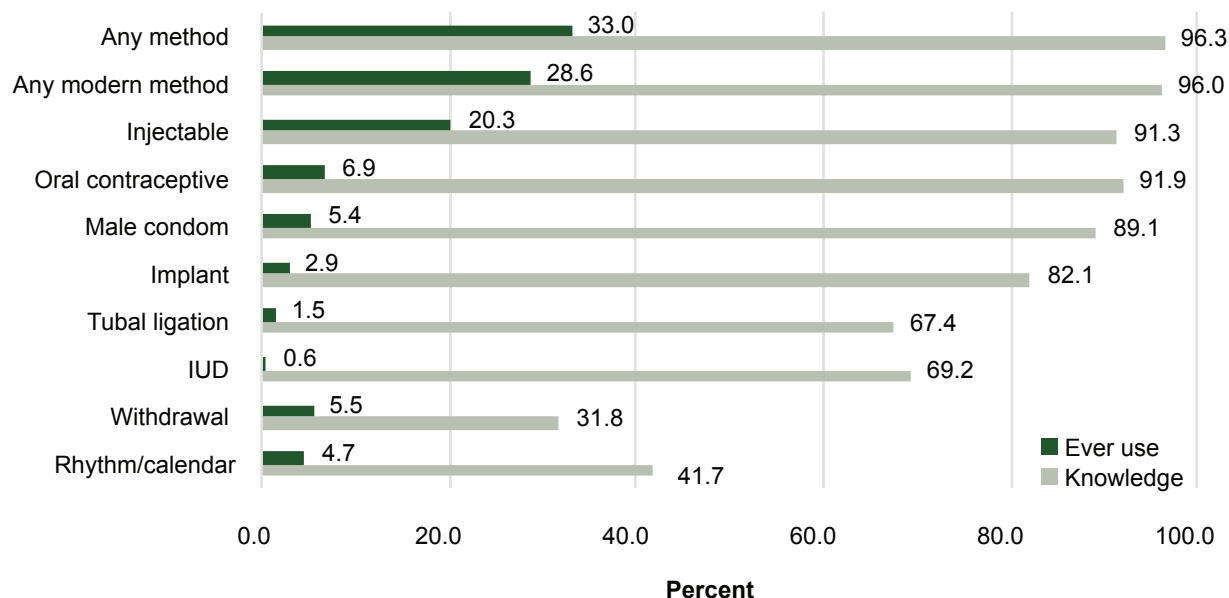
Sources: 2014 Kigoma Reproductive Health Survey, DHS-2010.

Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

4.2 Ever Use of Contraception

For the RHS, if a woman responded that she had heard of a particular contraceptive method, she was asked whether she had ever used it. Figure 4.1 and Table 4.2 shows that although almost all women had heard of modern contraceptive methods, only 28.6% of all women in Kigoma had ever used one. Ever use of a contraceptive method was quite low for each method except the injectable, which has been used by a fifth of women (20.3%). The second most popular method, oral contraception (pill), has been used by only 6.9%, and male condoms by 5.4%. Although more than two-thirds of women had heard of the IUD, fewer than 1% had ever used one (0.6%); similarly, tubal ligation was little used (1.5%). Implants have been used by 2.9% of women. Among traditional methods, relatively few women had ever used rhythm (4.7%) or withdrawal (5.5%).

Figure 4.1: Knowledge and Ever Use of Methods of Contraception Among All Women Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 4.2: Ever Use of Contraceptive Methods, by Selected Characteristics (Percent)
All Women Aged 15-49 Years

| Ever Use of Contraceptive Methods (%) | | | Ever Use of Contraceptive Methods by Method (%) | | | | | | | | | | | | | | | Number of Women | |
|---------------------------------------|-------------|------|---|-----------|-----|------------|---------|------|-------------|---------------|-----------|---------------|-----|-----------------------|------------|-------------------------|-------|-----------------|-------|
| Modern | Traditional | Any | Tubal Ligation | Vasectomy | IUD | Injectable | Implant | Pill | Male Condom | Female Condom | Diaphragm | Foam or Jelly | LAM | Rhythm, Calendar, BOM | Withdrawal | Emergency Contraception | Other | | |
| Residence | | | | | | | | | | | | | | | | | | | |
| Urban | 37.2 | 11.3 | 41.3 | 2.0 | 0.1 | 0.7 | 24.3 | 5.7 | 10.3 | 10.4 | 0.6 | 0.0 | 0.0 | 1.0 | 7.5 | 5.9 | 0.0 | 0.2 | 808 |
| Rural | 26.5 | 8.2 | 31.0 | 1.4 | 0.0 | 0.6 | 19.3 | 2.2 | 6.1 | 4.2 | 0.2 | 0.0 | 0.0 | 0.2 | 4.0 | 5.4 | 0.1 | 0.1 | 3,108 |
| Current union status | | | | | | | | | | | | | | | | | | | |
| In union | 36.0 | 11.8 | 42.3 | 2.1 | 0.1 | 0.8 | 26.7 | 3.5 | 8.9 | 5.1 | 0.3 | 0.1 | 0.0 | 0.5 | 6.2 | 7.5 | 0.1 | 0.2 | 2,544 |
| Not in union | 15.6 | 3.6 | 16.8 | 0.4 | 0.0 | 0.3 | 9.0 | 1.8 | 3.4 | 5.9 | 0.2 | 0.0 | 0.0 | 0.2 | 2.0 | 2.1 | 0.1 | 0.1 | 1,372 |
| Education level | | | | | | | | | | | | | | | | | | | |
| No education | 25.4 | 4.2 | 28.2 | 1.6 | 0.0 | 0.4 | 19.0 | 2.4 | 3.8 | 2.2 | 0.3 | 0.0 | 0.0 | 0.1 | 1.0 | 3.7 | 0.0 | 0.1 | 958 |
| Some primary | 26.3 | 6.2 | 29.8 | 1.2 | 0.0 | 0.5 | 19.0 | 2.1 | 7.2 | 4.3 | 0.4 | 0.1 | 0.0 | 0.2 | 2.3 | 5.1 | 0.0 | 0.2 | 627 |
| Completed primary | 31.1 | 10.3 | 36.6 | 1.7 | 0.1 | 0.6 | 22.7 | 3.1 | 8.6 | 5.7 | 0.2 | 0.0 | 0.0 | 0.3 | 5.6 | 6.2 | 0.1 | 0.1 | 1,926 |
| Attended secondary or higher | 28.3 | 16.8 | 33.2 | 0.8 | 0.0 | 0.9 | 14.0 | 4.0 | 6.0 | 13.7 | 0.3 | 0.0 | 0.0 | 1.5 | 13.4 | 7.4 | 0.3 | 0.2 | 405 |
| Wealth tercile | | | | | | | | | | | | | | | | | | | |
| Low | 23.7 | 4.9 | 26.3 | 0.9 | 0.0 | 0.4 | 16.7 | 2.0 | 4.5 | 3.9 | 0.3 | 0.1 | 0.0 | 0.1 | 1.5 | 3.7 | 0.0 | 0.1 | 1,235 |
| Middle | 27.7 | 8.8 | 33.3 | 1.2 | 0.1 | 0.3 | 20.8 | 2.6 | 6.0 | 4.0 | 0.3 | 0.0 | 0.0 | 0.2 | 3.6 | 6.8 | 0.1 | 0.1 | 1,277 |
| High | 33.9 | 12.2 | 38.9 | 2.3 | 0.0 | 1.0 | 23.0 | 3.9 | 10.0 | 8.1 | 0.3 | 0.0 | 0.0 | 0.8 | 8.6 | 6.0 | 0.2 | 0.2 | 1,404 |
| Total | 28.6 | 8.8 | 33.0 | 1.5 | 0.0 | 0.6 | 20.3 | 2.9 | 6.9 | 5.4 | 0.3 | 0.0 | 0.0 | 0.4 | 4.7 | 5.5 | 0.1 | 0.1 | 3,916 |

Abbreviations: BOM, Billings Ovulation Method; IUD, intrauterine device; LAM, lactational amenorrhea method.
Source: 2014 Kigoma Reproductive Health Survey.
Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

Abbreviations: BOM, Billings Ovulation Method; IUD, intrauterine device; LAM, lactational amenorrhea method.

Source: 2014 Kigoma Reproductive Health Survey.

Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

Rates of ever use of contraception were higher among women in union for all methods except the male condom, where use was slightly higher among women not in union. Ever use of a modern method was higher in urban areas (37.2%) than in rural areas (26.5%), even for the injectable (urban, 24.3%; rural, 19.3%).

Use of implants, IUDs, and male condoms increased with education level. For pills and injectables, use rose with education and then dropped among those with secondary education, especially for the injectable. Considerably more women with any secondary education had used male condoms and the rhythm method than had women with less education. For all methods, both modern and traditional, ever use increased with wealth. The difference was greatest for the rhythm method (highest wealth tercile, 8.6%; lowest, 1.5%).

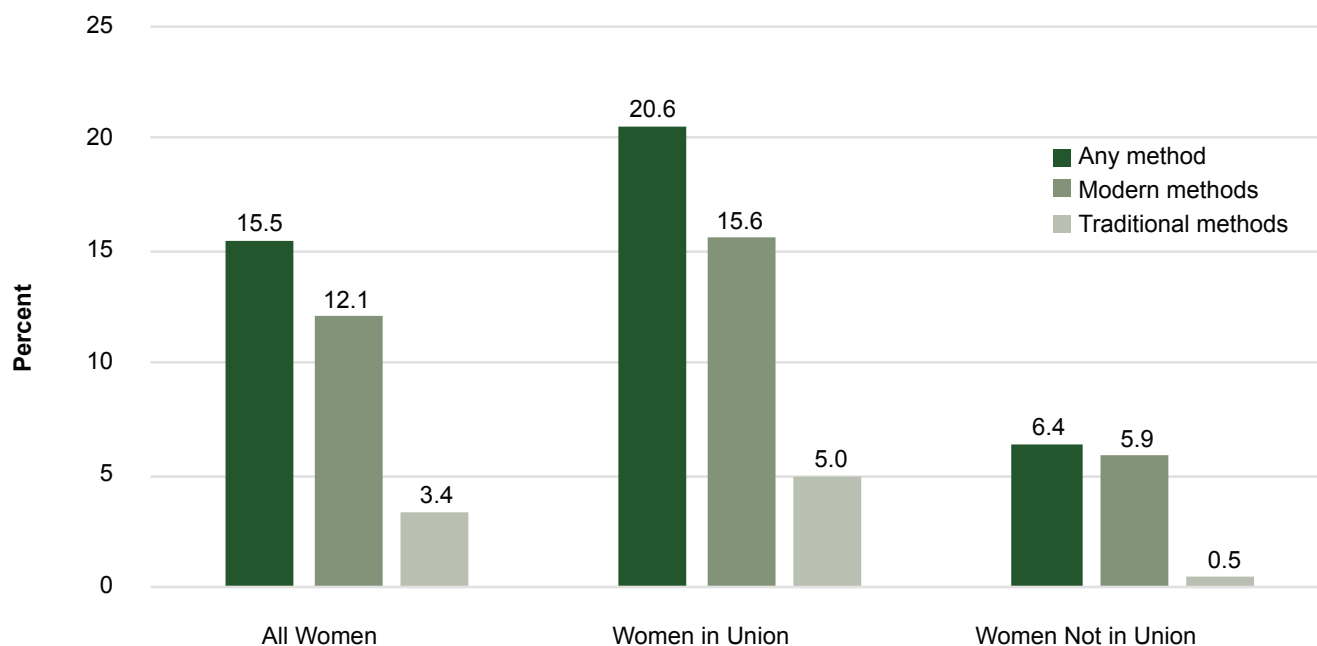
The proportion of all women in Kigoma who had ever used contraception was smaller than the nationwide ever use rates from the 2010 DHS, especially for the pill and condom. Injectable ever use, however, was as high in Kigoma as it was in the nation as a whole.

4.3 Current Use of Contraception

The level of current use of contraceptive methods, especially for women in union, is one of the most important indicators used to assess the success of family planning program activities, and is one of the key determinants of control over fertility.

Current contraceptive use among all women in Kigoma was very low, at only 15.5% of women (modern, 12.1%; traditional, 3.4%) (Figure 4.2, Table 4.3).

Figure 4.2: Current Use of Contraception, by Method Type and Union Status, Among Women Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 4.3: Current Use of Contraceptive Type of Methods, by Type of Method and Selected Characteristics (Percent Distribution)
All Women Aged 15-49 Years

| Current Contraceptive Use (%) | | | | Current Use of Contraceptive Methods by Method (%) | | | | | | | | | | | | | Total | Number of Women | | |
|--|--|--|-----|--|--------|--------------------------------------|-------------------------------|-----|-------------|---------|------|-------------|-----|-----------------------|------------|--------------------------|-------|-----------------|---------------------|-------|
| Characteristic | | | Any | Traditional | Modern | Female Sterilization, Tubal Ligation | Male Sterilization, Vasectomy | IUD | Injectables | Implant | Pill | Male Condom | LAM | Rhythm, Calendar, BOM | Withdrawal | Other Traditional Method | | | Currently Not Using | |
| Residence | | | | | | | | | | | | | | | | | | | | |
| Urban | | | | 16.3 | 4.0 | 20.3 | 2.0 | 0.1 | 0.3 | 8.0 | 3.1 | 1.7 | 1.1 | 0.0 | 2.6 | 1.4 | 0.1 | 79.7 | 100.0 | 808 |
| Rural | | | | 11.1 | 3.2 | 14.3 | 1.4 | 0.0 | 0.2 | 6.6 | 1.2 | 0.8 | 0.8 | 0.0 | 1.3 | 1.9 | 0.0 | 85.7 | 100.0 | 3108 |
| Age group (yr) | | | | | | | | | | | | | | | | | | | | |
| 15-19 | | | | 2.5 | 0.8 | 3.4 | 0.0 | 0.0 | 0.0 | 1.3 | 0.3 | 0.1 | 0.8 | 0.0 | 0.6 | 0.2 | 0.0 | 96.6 | 100.0 | 865 |
| 20-24 | | | | 13.2 | 4.0 | 17.1 | 0.1 | 0.0 | 0.2 | 8.1 | 2.2 | 1.1 | 1.3 | 0.1 | 1.3 | 2.7 | 0.0 | 82.9 | 100.0 | 716 |
| 25-29 | | | | 13.8 | 6.3 | 20.1 | 0.6 | 0.0 | 0.0 | 8.0 | 3.2 | 1.2 | 0.8 | 0.0 | 2.7 | 3.6 | 0.0 | 79.9 | 100.0 | 637 |
| 30-34 | | | | 19.7 | 2.6 | 22.3 | 1.0 | 0.0 | 0.5 | 13.2 | 2.5 | 1.6 | 0.9 | 0.0 | 1.0 | 1.6 | 0.0 | 77.7 | 100.0 | 525 |
| 35-39 | | | | 17.5 | 4.3 | 21.8 | 2.2 | 0.3 | 0.6 | 10.2 | 1.2 | 1.7 | 1.2 | 0.0 | 2.5 | 1.8 | 0.0 | 78.2 | 100.0 | 487 |
| 40-44 | | | | 17.2 | 4.5 | 21.7 | 6.8 | 0.0 | 0.5 | 7.1 | 1.3 | 0.9 | 0.6 | 0.0 | 2.8 | 1.4 | 0.3 | 78.3 | 100.0 | 416 |
| 45-49 | | | | 8.3 | 1.8 | 10.1 | 6.0 | 0.2 | 0.0 | 1.6 | 0.0 | 0.5 | 0.0 | 0.0 | 0.9 | 0.9 | 0.0 | 89.9 | 100.0 | 270 |
| Education level | | | | | | | | | | | | | | | | | | | | |
| No education | | | | 10.8 | 1.6 | 12.4 | 1.6 | 0.0 | 0.2 | 6.7 | 1.4 | 0.4 | 0.5 | 0.0 | 0.4 | 1.1 | 0.1 | 87.6 | 100.0 | 958 |
| Some primary | | | | 11.1 | 2.7 | 13.7 | 1.2 | 0.0 | 0.3 | 5.6 | 1.3 | 1.4 | 1.3 | 0.0 | 0.7 | 1.9 | 0.1 | 86.3 | 100.0 | 627 |
| Completed primary | | | | 13.2 | 4.2 | 17.3 | 1.7 | 0.1 | 0.2 | 8.0 | 1.6 | 0.9 | 0.6 | 0.0 | 1.8 | 2.3 | 0.0 | 82.7 | 100.0 | 1,926 |
| Attended secondary or higher | | | | 11.6 | 5.0 | 16.6 | 0.8 | 0.0 | 0.3 | 3.9 | 2.4 | 1.8 | 2.4 | 0.0 | 4.4 | 0.6 | 0.0 | 83.4 | 100.0 | 405 |
| Wealth tercile | | | | | | | | | | | | | | | | | | | | |
| Low | | | | 9.9 | 2.2 | 12.0 | 0.9 | 0.0 | 0.3 | 6.3 | 1.1 | 0.5 | 0.8 | 0.1 | 0.8 | 1.3 | 0.0 | 88.0 | 100.0 | 1,235 |
| Middle | | | | 12.3 | 3.4 | 15.8 | 1.2 | 0.1 | 0.0 | 7.4 | 1.6 | 1.0 | 1.0 | 0.0 | 1.2 | 2.3 | 0.0 | 84.2 | 100.0 | 1,277 |
| High | | | | 13.9 | 4.4 | 18.3 | 2.3 | 0.0 | 0.4 | 6.8 | 2.1 | 1.4 | 0.9 | 0.0 | 2.6 | 1.7 | 0.0 | 81.7 | 100.0 | 1,404 |
| Total | | | | 12.1 | 3.4 | 15.5 | 1.5 | 0.0 | 0.2 | 6.9 | 1.6 | 1.0 | 0.9 | 0.0 | 1.6 | 1.8 | 0.0 | 84.5 | 100.0 | 3,916 |
| Abbreviations: BOM, Billings Ovulation Method; IUD, intrauterine device; LAM, lactational amenorrhea method. | | | | | | | | | | | | | | | | | | | | |
| Source: 2014 Kigoma Reproductive Health Survey. | | | | | | | | | | | | | | | | | | | | |
| Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed. | | | | | | | | | | | | | | | | | | | | |

Abbreviations: BOM, Billings Ovulation Method; IUD, intrauterine device; LAM, lactational amenorrhea method.

Source: 2014 Kigoma Reproductive Health Survey.

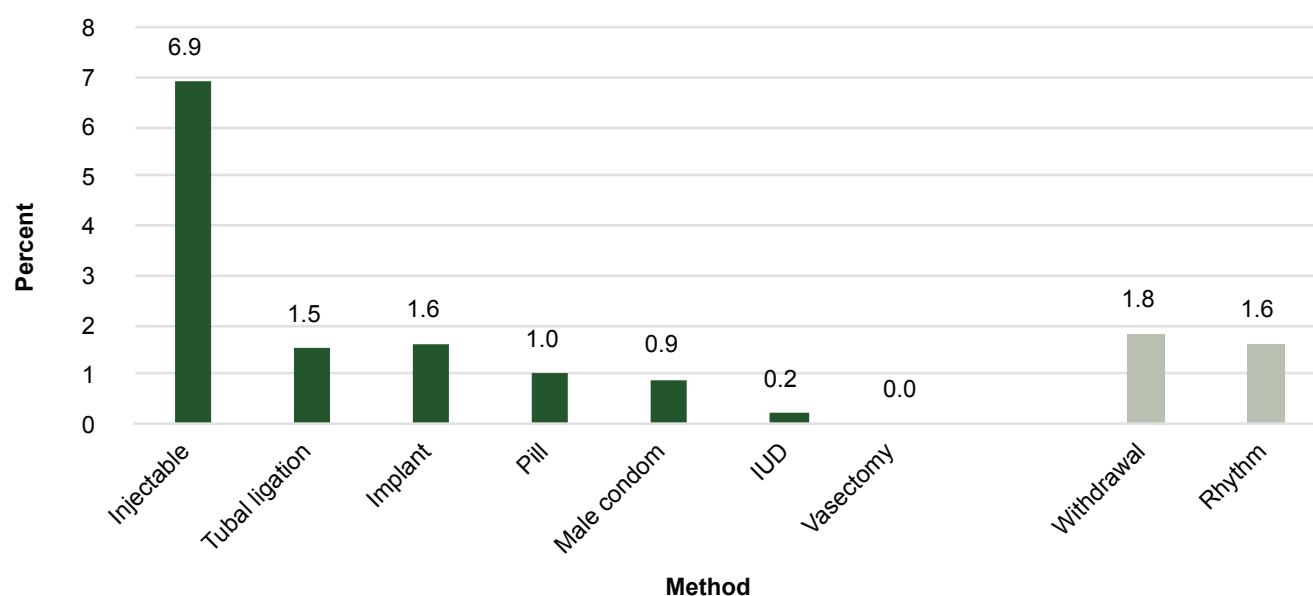
Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

All Women

Among all women of reproductive age in Kigoma, injectable contraception was the most widely used method (6.9%), with each of the other modern methods being used by fewer than 2% of women (Figure 4.3, Table 4.3).

Current use of any contraceptive method was higher in urban areas (20.3%) than in rural areas (14.3%). Additionally, current use increased with age until it peaked at ages 30-34 (22.3%) and declined in older women. Any current contraceptive use increased with wealth.

Figure 4.3: Current Use of Specific Methods of Contraception Among All Kigoma Women Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Women in Union

Current contraceptive use among women in union was low (20.6% [modern, 15.6%; traditional, 5.0%]) (Table 4.4). As among all women (Figure 4.4), the most popular method was the injectable, which was used by 8.9% of women in union. No other method was used by more than 3% of women in union. The second most popular modern method among women in union was tubal ligation (2.1%), which was favored by women over the age of 40. The highly effective reversible methods were used by very few women (implant, 1.8%; IUD, 0.3%). The traditional methods of withdrawal (2.8%) and rhythm (2.2%) were used by more women than was any modern method except the injectable.

Table 4.4: Current Use of Contraceptive Methods, by Type of Method and Selected Characteristics (Percent Distribution)
Women in Union Aged 15-49 Years

| Current Contraceptive Use (%) | | | Current Use of Contraceptive Methods by Method (%) | | | | | | | | | | | | | | Total | Number of Women |
|-------------------------------|--------|-------------|--|--------------------------------------|-------------------------------|-----|-------------|---------|------|-------------|-----|-----------------------|-----|-----|------------|--------------------------|---------------------|-----------------|
| | | | Rhythm, Calendar, BOM | | | | | | | | | | | | | | | |
| Characteristic | Modern | Traditional | Any | Female Sterilization, Tubal Ligation | Male Sterilization, Vasectomy | IUD | Injectables | Implant | Pill | Male Condom | LAM | Rhythm, Calendar, BOM | | | Withdrawal | Other Traditional Method | Currently Not Using | |
| | | | | | | | | | | | | | | | | | | |
| Residence | | | | | | | | | | | | | | | | | | |
| Urban | 23.2 | 6.5 | 29.6 | 3.3 | 0.1 | 0.6 | 11.8 | 3.4 | 2.5 | 1.4 | 0.0 | 4.0 | 2.4 | 0.1 | 70.4 | 100.0 | 475 | |
| Rural | 14.0 | 4.7 | 18.7 | 1.8 | 0.1 | 0.3 | 8.3 | 1.5 | 1.2 | 0.8 | 0.0 | 1.8 | 2.9 | 0.0 | 81.3 | 100.0 | 2,069 | |
| Age group (yr) | | | | | | | | | | | | | | | | | | |
| 15-19 | 5.2 | 2.3 | 7.5 | 0.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.4 | 0.4 | 0.0 | 1.1 | 1.2 | 0.0 | 92.5 | 100.0 | 146 | |
| 20-24 | 14.7 | 6.2 | 20.9 | 0.2 | 0.0 | 0.4 | 9.4 | 1.7 | 1.5 | 1.3 | 0.2 | 1.9 | 4.3 | 0.0 | 79.1 | 100.0 | 440 | |
| 25-29 | 13.8 | 7.1 | 20.9 | 0.7 | 0.0 | 0.0 | 7.3 | 3.5 | 1.5 | 0.7 | 0.0 | 2.9 | 4.3 | 0.0 | 79.1 | 100.0 | 534 | |
| 30-34 | 20.5 | 3.2 | 23.7 | 1.2 | 0.0 | 0.5 | 13.9 | 2.3 | 1.6 | 1.0 | 0.0 | 1.2 | 2.0 | 0.0 | 76.3 | 100.0 | 437 | |
| 35-39 | 19.6 | 5.0 | 24.6 | 2.5 | 0.4 | 0.7 | 11.6 | 1.0 | 2.0 | 1.4 | 0.0 | 2.9 | 2.1 | 0.0 | 75.4 | 100.0 | 416 | |
| 40-44 | 19.0 | 5.4 | 24.4 | 7.2 | 0.0 | 0.5 | 8.2 | 1.6 | 1.1 | 0.5 | 0.0 | 3.3 | 1.7 | 0.4 | 75.6 | 100.0 | 348 | |
| 45-49 | 8.4 | 2.2 | 10.5 | 5.7 | 0.2 | 0.0 | 1.9 | 0.0 | 0.6 | 0.0 | 0.0 | 1.1 | 1.1 | 0.0 | 89.5 | 100.0 | 223 | |
| Education level | | | | | | | | | | | | | | | | | | |
| No education | 11.8 | 2.1 | 13.9 | 2.0 | 0.0 | 0.3 | 6.9 | 1.5 | 0.5 | 0.6 | 0.0 | 0.6 | 1.4 | 0.1 | 86.1 | 100.0 | 741 | |
| Some primary | 14.3 | 4.6 | 18.9 | 1.9 | 0.0 | 0.4 | 7.3 | 1.4 | 2.1 | 1.2 | 0.0 | 1.1 | 3.3 | 0.1 | 81.1 | 100.0 | 373 | |
| Completed primary | 17.2 | 6.0 | 23.2 | 2.2 | 0.2 | 0.3 | 10.7 | 1.9 | 1.3 | 0.5 | 0.1 | 2.5 | 3.6 | 0.0 | 76.8 | 100.0 | 1,280 | |
| Attended secondary or higher | 25.8 | 12.4 | 38.3 | 2.1 | 0.0 | 1.0 | 8.8 | 4.2 | 4.7 | 5.0 | 0.0 | 10.7 | 1.7 | 0.0 | 61.7 | 100.0 | 150 | |
| Wealth tercile | | | | | | | | | | | | | | | | | | |
| Low | 12.5 | 3.0 | 15.5 | 1.1 | 0.0 | 0.4 | 8.1 | 1.3 | 0.7 | 0.9 | 0.1 | 1.0 | 1.9 | 0.1 | 84.5 | 100.0 | 1,235 | |
| Middle | 14.9 | 5.0 | 19.9 | 1.7 | 0.2 | 0.0 | 8.8 | 1.8 | 1.4 | 1.0 | 0.0 | 1.6 | 3.4 | 0.0 | 80.1 | 100.0 | 1,277 | |
| High | 19.8 | 7.3 | 27.0 | 3.6 | 0.1 | 0.6 | 10.0 | 2.4 | 2.2 | 0.9 | 0.0 | 4.1 | 3.1 | 0.1 | 73.0 | 100.0 | 1,404 | |
| Total | 15.6 | 5.0 | 20.6 | 2.1 | 0.1 | 0.3 | 8.9 | 1.8 | 1.4 | 0.9 | 0.0 | 2.2 | 2.8 | 0.0 | 79.4 | 100.0 | 2,544 | |
| Tanzania (DHS-2010) | 27.4 | 7.0 | 34.4 | 3.5 | N/A | 0.6 | 10.6 | 2.3 | 6.7 | 2.3 | 1.3 | 3.1 | 2.9 | 0.9 | 65.6 | 100.0 | 6,412 | |

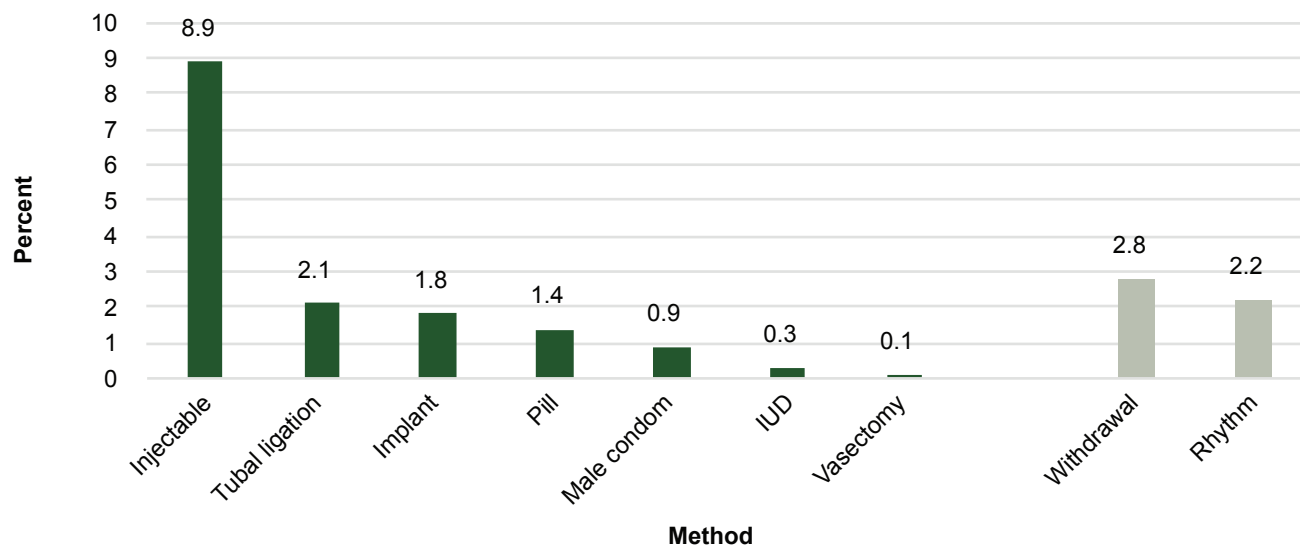
Abbreviations: BOM, Billings Ovulation Method; DHS-2010, 2010 Tanzania Demographic and Health Survey; IUD, intrauterine device; LAM, lactational amenorrhea method.
Sources: 2014 Kigoma Reproductive Health Survey, DHS-2010.
Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

Abbreviations: BOM, Billings Ovulation Method; DHS-2010, 2010 Tanzania Demographic and Health Survey; IUD, intrauterine device; LAM, lactational amenorrhea method.

Sources: 2014 Kigoma Reproductive Health Survey, DHS-2010.

Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

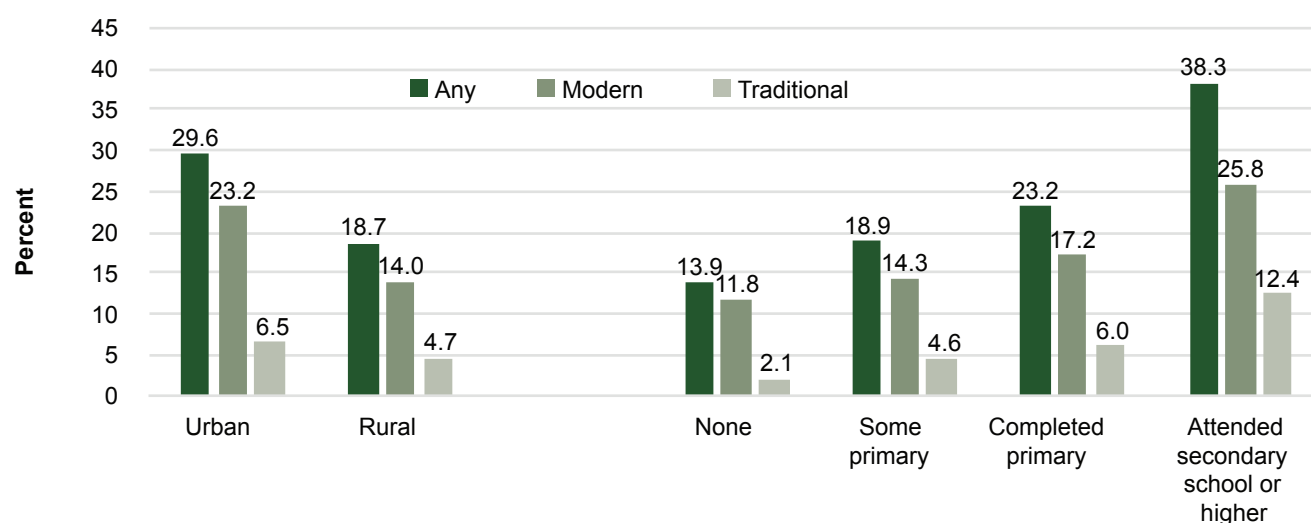
Figure 4.4: Current Use of Specific Methods of Contraception Among Women in Union, Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Among women in union, use of most methods increased with age, peaking among women aged 30–39 years and decreasing in older women. Overall, modern method use remained low, particularly for the long-acting reversible methods; more women were using the traditional (and less effective) methods of withdrawal and rhythm than were using IUDs, implants, or tubal ligation. A larger percentage of urban women than rural women used all methods except withdrawal, and use also rose with education level (Figure 4.5).

Figure 4.5: Current Use of Contraception by Residence and Education Level Among Women in Union, Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Sexually Active Women Not in Union

A larger percentage of sexually active women who were not in union used contraception (any method, 35.3%; modern, 30.6%) than did women in union (Table 4.5). Similar to women in union, injectables were the most popular method for this group (13.7%). However, use of the male condom was considerably higher (7.7%) than it was among women in union (0.9%). Eight percent of women not in union also used the implant, but oral contraception was rarely used (0.8%).

Table 4.5: Current Use of Contraceptive Methods, by Type of Method and by Selected Characteristics (Percent Distribution)
Sexually Active Women Aged 15-49 Years Not in Union

| Current Contraceptive Use (%) | | | | Current Use of Contraceptive Methods by Method (%) | | | | | | | | | Number of Women |
|-------------------------------|--|--|--|--|-----|------------|---------|------|-------------|-----------------------|---------------------|-------|-----------------|
| | | | | Female Sterilization, Tubal Ligation | IUD | Injectable | Implant | Pill | Male Condom | Rhythm, Calendar, BOM | Currently Not Using | Total | |
| Residence | | | | | | | | | | | | | |
| Urban | | | | 1.2 | 0.0 | 12.1 | 12.6 | 0.0 | 5.3 | 5.0 | 63.8 | 100.0 | 45 |
| Rural | | | | 0.0 | 0.5 | 14.4 | 5.6 | 1.1 | 8.8 | 4.5 | 65.2 | 100.0 | 102 |
| Age group (yr) | | | | | | | | | | | | | |
| 15-24 | | | | 0.0 | 0.0 | 0.0 | 10.9 | 0.0 | 12.5 | 6.6 | 59.1 | 100.0 | 68 |
| 25-34 | | | | 0.0 | 0.0 | 23.4 | 5.4 | 2.3 | 2.5 | 3.8 | 62.7 | 100.0 | 51 |
| 35-49 | | | | 2.4 | 2.1 | 2.6 | 2.6 | 0.0 | 2.5 | 0.0 | 87.7 | 100.0 | 28 |
| Wealth tercile | | | | | | | | | | | | | |
| Low | | | | 0.0 | 0.0 | 17.9 | 1.5 | 0.0 | 4.9 | 4.0 | 71.7 | 100.0 | 41 |
| Middle | | | | 0.0 | 0.0 | 22.1 | 7.0 | 2.8 | 10.6 | 3.3 | 54.3 | 100.0 | 35 |
| High | | | | 0.8 | 0.7 | 6.3 | 12.0 | 0.0 | 7.6 | 5.8 | 66.8 | 100.0 | 71 |
| Total | | | | 0.4 | 0.3 | 13.7 | 7.8 | 0.8 | 7.7 | 4.6 | 64.7 | 100.0 | 147 |

Abbreviations: BOM, Billings Ovulation Method; IUD, intrauterine device.

Source: 2014 Kigoma Reproductive Health Survey.

Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

Abbreviations: BOM, Billings Ovulation Method; IUD, intrauterine device.

Source: 2014 Kigoma Reproductive Health Survey.

Note: Traditional methods include rhythm/calendar/BOM, withdrawal, and other. Modern methods include the remaining methods listed.

4.4 Number of Living Children at First Use of Contraception

Few women in Kigoma use contraception to delay their first birth; they appear to be more inclined to use it to space births. Among women who had ever used a method to control their fertility, only 8.2% used contraception before giving birth to their first child (Table 4.6, Figure 4.6). First-time contraceptive use was highest after the first birth; 31.7% of users began their contraceptive use when they had one living child.

An additional one-fifth of women (20.2%) began contraceptive use when they had two children. Thus, the majority (60.1%) of women who had ever used contraception began their use before they had three children.

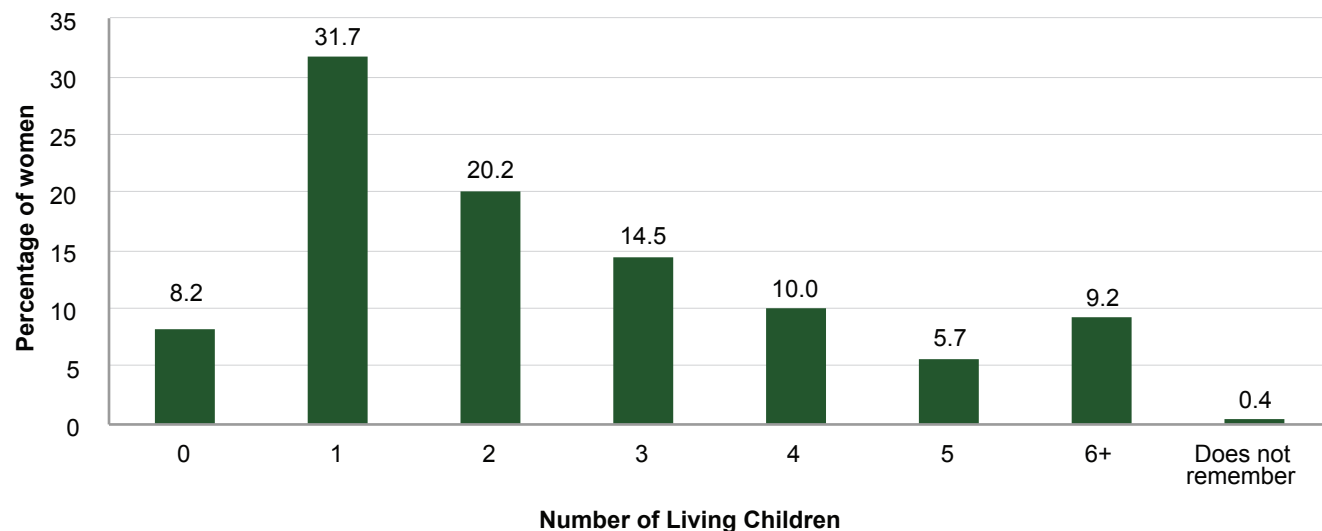
Table 4.6: Number of Living Children at First Use of Contraception, by Selected Characteristics (Percent Distribution)

Women Aged 15-49 Years Who Have Ever Used Contraception

| Characteristic | Number of Living Children at First Contraceptive Use (%) | | | | | | | | Total | Number of Women |
|------------------------------|--|------|------|------|------|------|------|-------------------|-------|-----------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | Does Not Remember | | |
| Residence | | | | | | | | | | |
| Urban | 12.9 | 35.4 | 19.9 | 14.9 | 8.0 | 2.5 | 5.6 | 0.8 | 100.0 | 331 |
| Rural | 6.7 | 30.5 | 20.3 | 14.3 | 10.7 | 6.8 | 10.4 | 0.2 | 100.0 | 1,005 |
| Age group (yr) | | | | | | | | | | |
| 15-19 | 55.4 | 41.8 | 1.6 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 56 |
| 20-24 | 19.0 | 51.6 | 24.9 | 4.6 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 225 |
| 25-29 | 5.4 | 35.5 | 25.5 | 22.2 | 9.1 | 1.8 | 0.0 | 0.4 | 100.0 | 281 |
| 30-34 | 2.8 | 22.8 | 24.3 | 19.8 | 14.0 | 8.6 | 7.7 | 0.0 | 100.0 | 256 |
| 35-39 | 0.8 | 26.4 | 15.1 | 14.9 | 14.5 | 8.4 | 19.3 | 0.6 | 100.0 | 242 |
| 40-44 | 0.0 | 18.3 | 15.1 | 12.9 | 14.4 | 10.2 | 27.2 | 1.8 | 100.0 | 187 |
| 45-49 | 1.6 | 15.9 | 11.4 | 13.8 | 19.1 | 17.6 | 20.6 | 0.0 | 100.0 | 89 |
| Education level | | | | | | | | | | |
| No education | 2.1 | 18.9 | 23.0 | 20.9 | 13.4 | 7.6 | 13.2 | 0.9 | 100.0 | 268 |
| Some primary | 7.7 | 27.7 | 23.5 | 17.0 | 11.9 | 5.8 | 6.4 | 0.0 | 100.0 | 190 |
| Completed primary | 6.9 | 33.8 | 20.0 | 13.1 | 9.7 | 6.1 | 10.2 | 0.3 | 100.0 | 739 |
| Attended secondary or higher | 28.8 | 52.8 | 11.0 | 5.2 | 1.8 | 0.0 | 0.0 | 0.4 | 100.0 | 139 |
| Wealth tercile | | | | | | | | | | |
| Low | 7.2 | 23.5 | 21.8 | 18.2 | 9.8 | 8.1 | 11.4 | 0.0 | 100.0 | 330 |
| Middle | 5.4 | 29.8 | 22.9 | 15.2 | 11.9 | 5.7 | 8.9 | 0.2 | 100.0 | 440 |
| High | 11.2 | 38.2 | 17.1 | 11.6 | 8.6 | 4.4 | 8.2 | 0.8 | 100.0 | 566 |
| Total | 8.2 | 31.7 | 20.2 | 14.5 | 10.0 | 5.7 | 9.2 | 0.4 | 100.0 | 1,336 |

Source: 2014 Kigoma Reproductive Health Survey.

Figure 4.6: Number of Living Children at First Use of Contraception Among Women Aged 15-49 Who Have Ever Used Contraception (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

4.5 Source of Modern Contraception Methods

Almost half of the women using modern contraception obtained their supplies from dispensaries (47.8%). Smaller percentages of women went to hospitals (17.4%), health centers (14.6%), or pharmacies (8.0%) (Table 4.7, Figure 4.7). Rural women, in particular, were more likely to obtain contraception from dispensaries (56.0%; urban, 25.2%). Urban women, however, preferred to obtain contraception from hospitals (38.5%; rural, 9.8%).

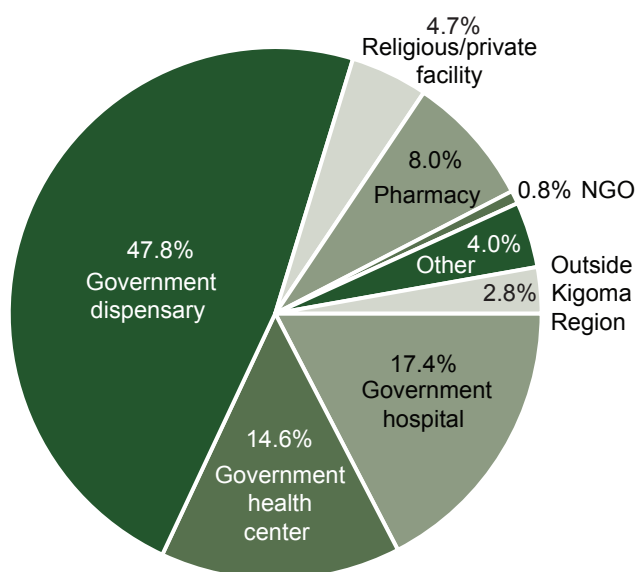
A greater percentage of women who were older, had attended secondary school, or were in the highest wealth tercile got their supplies from hospitals. Women with secondary education were more likely than others to go to religious or private health facilities, pharmacies, or markets/shops for their contraceptive supplies.

Table 4.7: Source of Modern Contraceptives Currently Used, by Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years Who Are Currently Using a Modern Method^a

| Characteristic | Source of Contraceptive Method (%) | | | | | | | | | | | | | | | Number of Women |
|------------------------------|------------------------------------|---------------|------------|------------------------------------|----------|-----|------------|----------------------------|--------------------------|-------------------|-------|-------------------------------|----------------------------|-------|-------|-----------------|
| | Government Facility | | | Religious/ Private Health Facility | Pharmacy | NGO | VCT Center | CBD/ Village Health Worker | Family, Friend, Neighbor | Market, Shop, Bar | Other | Facility Not in Kigoma Region | Does Not Remember/ Missing | Total | | |
| | Hospital | Health Center | Dispensary | | | | | | | | | | | | | |
| Residence | | | | | | | | | | | | | | | | |
| Urban | 38.5 | 20.3 | 25.2 | 3.0 | 7.1 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 3.2 | 0.8 | 0.8 | 0.0 | 100.0 | 126 |
| Rural | 9.8 | 12.5 | 56.0 | 5.3 | 8.3 | 1.1 | 0.2 | 0.9 | 0.6 | 0.6 | 0.3 | 0.5 | 3.5 | 1.0 | 100.0 | 356 |
| Age group (yr) | | | | | | | | | | | | | | | | |
| 15-19 | b | b | b | b | b | b | b | b | b | b | b | b | b | b | 100.0 | 22 |
| 20-24 | 14.8 | 20.1 | 39.6 | 3.7 | 13.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.0 | 4.7 | 1.7 | 100.0 | 89 |
| 25-29 | 13.4 | 16.1 | 53.5 | 6.4 | 4.4 | 2.0 | 0.0 | 2.5 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 100.0 | 89 |
| 30-34 | 18.3 | 15.5 | 54.3 | 1.4 | 6.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 100.0 | 102 |
| 35-39 | 18.7 | 5.6 | 49.4 | 6.5 | 8.1 | 1.6 | 0.0 | 0.6 | 0.0 | 0.0 | 1.9 | 2.3 | 3.9 | 1.4 | 100.0 | 83 |
| 40-44 | 18.3 | 14.7 | 53.4 | 6.9 | 0.9 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 1.8 | 0.9 | 100.0 | 72 |
| 45-49 | 47.0 | 10.4 | 33.9 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 | 0.0 | 100.0 | 25 |
| Education level | | | | | | | | | | | | | | | | |
| No education | 13.0 | 14.3 | 57.9 | 1.2 | 5.7 | 2.1 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.9 | 2.2 | 100.0 | 102 |
| Some primary | 17.9 | 22.8 | 38.0 | 3.1 | 9.9 | 2.1 | 0.0 | 1.3 | 0.0 | 1.3 | 0.0 | 0.0 | 3.7 | 0.0 | 100.0 | 69 |
| Completed primary | 17.4 | 12.8 | 49.9 | 6.3 | 6.9 | 0.0 | 0.0 | 1.5 | 0.5 | 0.5 | 1.0 | 0.7 | 2.5 | 0.4 | 100.0 | 264 |
| Attended secondary or higher | 26.9 | 12.0 | 28.9 | 6.3 | 15.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.4 | 0.0 | 4.8 | 0.0 | 100.0 | 47 |
| Wealth tercile | | | | | | | | | | | | | | | | |
| Low | 4.8 | 14.0 | 59.4 | 2.2 | 10.3 | 2.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 1.7 | 3.2 | 1.4 | 100.0 | 122 |
| Middle | 13.7 | 9.1 | 55.7 | 5.8 | 8.8 | 0.0 | 0.5 | 1.9 | 0.6 | 0.6 | 0.6 | 0.5 | 2.8 | 0.0 | 100.0 | 159 |
| High | 28.7 | 19.6 | 33.6 | 5.3 | 5.8 | 0.7 | 0.0 | 0.3 | 0.7 | 0.7 | 2.1 | 0.0 | 2.5 | 0.9 | 100.0 | 201 |
| Total | 17.4 | 14.6 | 47.8 | 4.7 | 8.0 | 0.8 | 0.2 | 1.0 | 0.5 | 0.5 | 1.0 | 0.6 | 2.8 | 0.7 | 100.0 | 482 |

Abbreviations: CBD, community-based distribution; NGO, non-governmental organization; VCT, voluntary counseling and testing.
Source: 2014 Kigoma Reproductive Health Survey.
^a Excludes lactational amenorrhea method.
Fewer than 25 cases.

Figure 4.7: Source of Contraceptive Method Among All Current Modern Method Users (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

Contraceptive source decisions were influenced by the type of contraceptive available and by which method the woman was currently using. Dispensaries were the most common source among women who used injectables (59.4%), implants (46.9%), pills (33.6%), and other modern methods (44.3%) (Table 4.8, Figure 4.8). Over half of condom users (56.0%) got their supplies from pharmacies. The majority of women who used tubal ligation as their method (2.1% of women in union) had the procedure done at a government hospital (52.4%), while an additional quarter went to a government dispensary (26.5%). Dispensaries were not usually able to perform tubal ligation. Thus, many of these procedures were likely done at refugee camps or other dispensaries functioning at a higher-than-normal level, such as those with donor funding or with outreach programs.

Table 4.8: Source of Modern Contraceptives, by Type of Method (Percent Distribution)
Women Aged 15-49 Years Who Are Currently Using a Modern Method^a

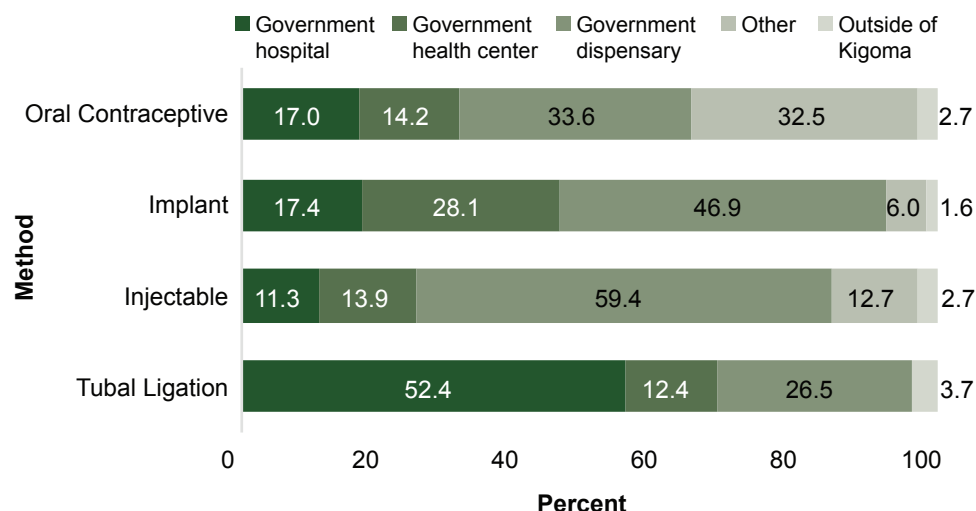
| Source of Contraception | Current Contraceptive Method Used (%) | | | | | | Total |
|-----------------------------------|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Female Sterilization | Injectable | Implant | Pill | Male Condom | Other Modern | |
| Government hospital | 52.4 | 11.3 | 17.4 | 17.0 | 3.5 | ^b | 17.4 |
| Government health center | 12.4 | 13.9 | 28.1 | 14.2 | 0.0 | ^b | 14.6 |
| Government dispensary | 26.5 | 59.4 | 46.9 | 33.6 | 12.5 | ^b | 47.8 |
| Religious/private health facility | 5.0 | 5.0 | 6.0 | 3.2 | 0.0 | ^b | 4.7 |
| Pharmacy | 0.0 | 3.8 | 0.0 | 21.2 | 56.0 | ^b | 8.0 |
| Other | 0.0 | 4.1 | 0.0 | 8.1 | 24.5 | ^b | 4.8 |
| Facility not in Kigoma Region | 3.7 | 2.6 | 1.6 | 2.7 | 3.6 | ^b | 2.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 |
| Number of women | 70 | 266 | 62 | 42 | 31 | 11 | 482 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Excludes lactational amenorrhea method.

^b Fewer than 25 cases.

Figure 4.8: Source of Supply for Specific Methods of Contraception Among All Current Users of Each Method (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

4.6 Time to Source of Modern Contraception Methods

Difficulty in getting to the source of contraceptive supply is often a major barrier to continued use of supply methods, or to initiating a long-acting reversible method. It is not, however, the only factor. Although in Kigoma the male condom was the quickest method to obtain (61.2% of condom users needed less than half an hour to get to their source of supply), the injectable was the most popular method. Three-quarters (74.6%) of injectable users were able to get to their source of supply in less than an hour; the implant and pill were equally convenient, with 79.6% and 74.8% of users, respectively, able to reach supplies in less than an hour (Table 4.9). Overall, three-quarters of supply-based contraceptive users were able to travel to their source of supply in under an hour (74.5%), and only 6.1% needed 2 hours or more to get their contraceptive (Figure 4.9).

Table 4.9: Time to Reach Source of Contraceptive Supplier, Among Supply-Based Method^a Users by Type of Method (Percent Distribution)

Women Aged 15-49 Who Are Currently Using Supply-Based Contraceptive Methods

| | Current Contraceptive Method Used | | | | | Total |
|------------------------------|-----------------------------------|------------|---------|-------|-------------|-------|
| | IUD | Injectable | Implant | Pill | Male Condom | |
| Length of Time | | | | | | |
| <30 min | b | 28.5 | 27.8 | 46.7 | 61.2 | 32.2 |
| 30-59 min | b | 46.1 | 51.8 | 28.1 | 9.6 | 42.3 |
| 1-2 hr | b | 18.6 | 12.3 | 23.5 | 19.6 | 18.6 |
| 2-3 hr | b | 4.8 | 6.5 | 1.7 | 2.0 | 4.8 |
| 3+ hr | b | 1.6 | 1.6 | 0.0 | 0.0 | 1.3 |
| Unsure/don't know | b | 0.4 | 0.0 | 0.0 | 7.6 | 0.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women ^c | 9 | 263 | 62 | 42 | 29 | 405 |

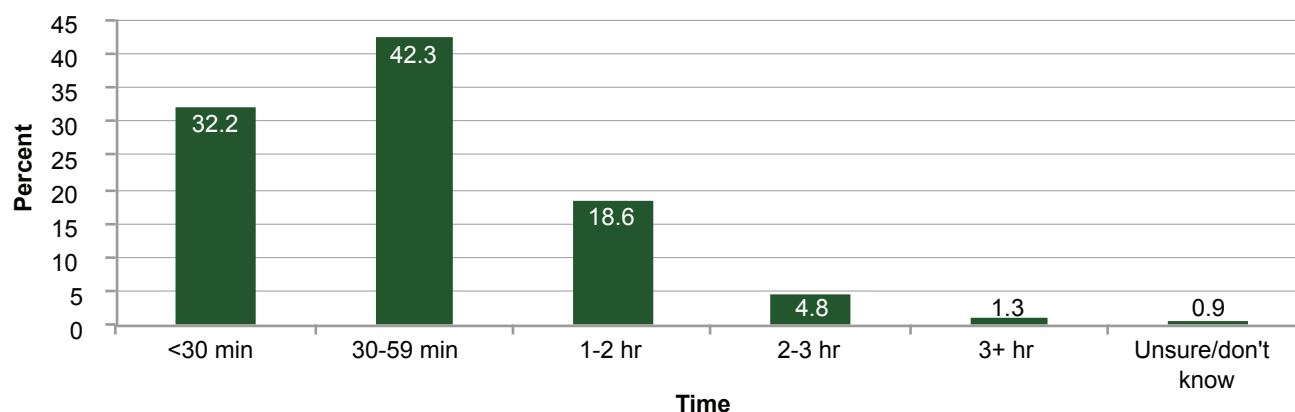
Source: 2014 Kigoma Reproductive Health Survey.

^a Includes all modern contraceptive methods except sterilization and lactational amenorrhea method.

^b Fewer than 25 cases.

^c Five missing cases, source "other" or "unknown."

Figure 4.9: Time to Reach Source of Contraceptive Supplies Among Women Aged 15-49 Years Who Were Current Users of a Supply-Based Method^a (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

^a All modern contraceptive methods except sterilization and lactational amenorrhea method.

4.7 Availability of Family Planning Services at Government Facilities

Among women who currently used supply-based contraceptive methods and obtained them from government facilities, most (71.1%) said that family planning services were available at any time from such facilities (Table 4.10.) The remaining 28.8% of women said that services were only available at certain times; 18.4% of women found the times to be inconvenient.

Table 4.10: Availability and Convenience of Family Planning Services at Kigoma Government Facilities (Percent Distribution)

Women Aged 15-49 Years Who Were Currently Using a Supply-Based Contraceptive Method^a Obtained at a Government Facility

| | Availability (%) |
|--|------------------|
| Government Family Planning Services | |
| Available at any time | 71.1 |
| Certain times: Convenient | 10.4 |
| Certain times: Inconvenient | 18.4 |
| Total | 100.0 |
| Number of women | 319 |

Source: 2014 Kigoma Reproductive Health Survey.

^a All modern contraceptive methods except sterilization and lactational amenorrhea method.

4.8 Payment for Contraceptive Methods

The great majority of current contraceptive users in Kigoma received their contraceptive supplies free of charge. Overall, only 19.1% of users (or their partners) paid for their method, and 80.6% did not (Table 4.11). More than nine of ten implant users (92.9%) and most users of the injectable (85.3%) or the pill (74.0%) did not have to pay for their method. For the small number of male condom users, 79.1% paid for the condoms, and 20.9% obtained them free of charge.

Table 4.11: Payment for Contraceptive Method Among Supply-Based Method^a Users, by Type of Method (Percent Distribution)

Women Aged 15-49 Years Who Are Currently Using Supply-Based Contraceptive Methods

| | | Current Contraceptive Method Used (%) | | | | | |
|-------------------------------|--------------|---------------------------------------|------------|---------|-------|-------------|-------|
| | | IUD | Injectable | Implant | Pill | Male Condom | Total |
| Paid for Contraceptive Method | | | | | | | |
| Yes | ^b | 14.3 | 7.1 | 26.0 | 79.1 | | 19.1 |
| No | ^b | 85.3 | 92.9 | 74.0 | 20.9 | | 80.6 |
| Unsure | ^b | 0.4 | 0.0 | 0.0 | 0.0 | | 0.3 |
| Total | ^b | 100.0 | 100.0 | 100.0 | 100.0 | | 100.0 |
| Number of women ^c | 9 | 263 | 62 | 42 | 29 | | 405 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Includes all modern contraceptive methods except sterilization and lactational amenorrhea method.

^b Fewer than 25 cases.

^c Five missing cases, source "other" or "unknown."

4.9 Preferred Contraceptive Method Among Current Users

The vast majority of contraceptive users (87.0%) was satisfied with their method and did not wish to change (Table 4.12). Almost half of all contraceptive users (48.7%) preferred the injectable, and 14.2% preferred implants (Figure 4.10). One-tenth of users preferred the traditional rhythm method (10.7%), and another tenth preferred withdrawal (10.1%). Smaller percentages preferred the pill (5.2%) or condoms (5.7%). Given that these preferences were very similar to the percentages among all contraceptive users and given the high rates of satisfaction, it would appear that despite low levels of contraceptive use, most current contraceptive users have found a method that suits them.

Table 4.12: Preferred Family Planning Method Among Current Users^a (Percent Distribution)

Women Aged 15-49 Who Are Currently Using Contraception

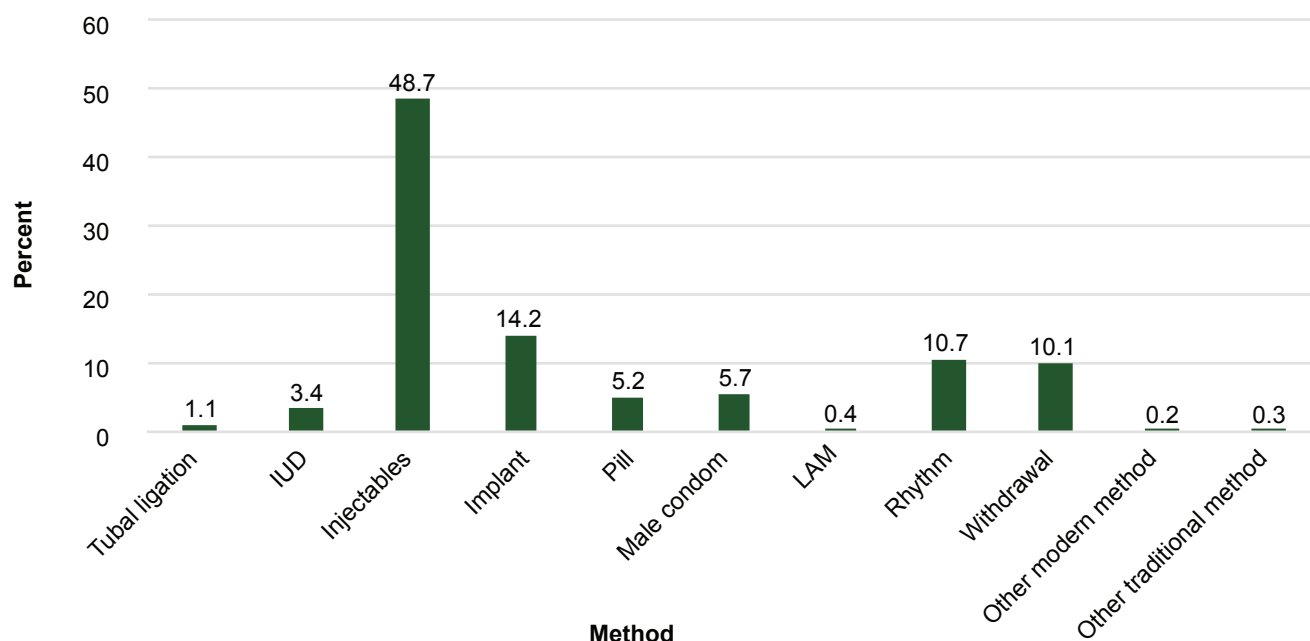
| | Total (%) |
|--------------------------------------|--------------|
| Prefer Current Method | |
| No | 13.0 |
| Yes | 87.0 |
| Preferred Method | |
| Female sterilization, tubal ligation | 1.1 |
| IUD | 3.4 |
| Injectables | 48.7 |
| Implant | 14.2 |
| Pill | 5.2 |
| Male condom | 5.7 |
| LAM | 0.4 |
| Rhythm | 10.7 |
| Withdrawal | 10.1 |
| Other modern method | 0.2 |
| Other traditional method | 0.3 |
| Total | 100.0 |
| Number of women | 550 |

Abbreviations: IUD, intrauterine device; LAM, lactational amenorrhea method.

Source: 2014 Kigoma Reproductive Health Survey.

^a Excludes 72 users of male/female sterilization.

Figure 4.10: Preferred Family Planning Method Among Women Who Were Current Contraceptive Users^a (Percent Distribution)



Abbreviations: IUD, intrauterine device; LAM, lactational amenorrhea.

Source: 2014 Kigoma Reproductive Health Survey.

^aExcludes 72 users of male or female sterilization.

Of the 13% of current contraceptive users who would like to change to a different method, the largest percentage (28.2%) would like to switch to injectables, and 23.3% would like implants (Figure 4.11, Table 4.13). An additional 14.5% were interested in the IUD, and 8.6% were interested in tubal ligation. Some women (16.3%) would prefer a traditional method.

Table 4.13: Preferred Family Planning Method, Among All Current Users^a Who Would Prefer a Different Method (Percent Distribution)

Women Aged 15-49 Years Who Are Contraceptive Users and Would Like to Use a Different Method

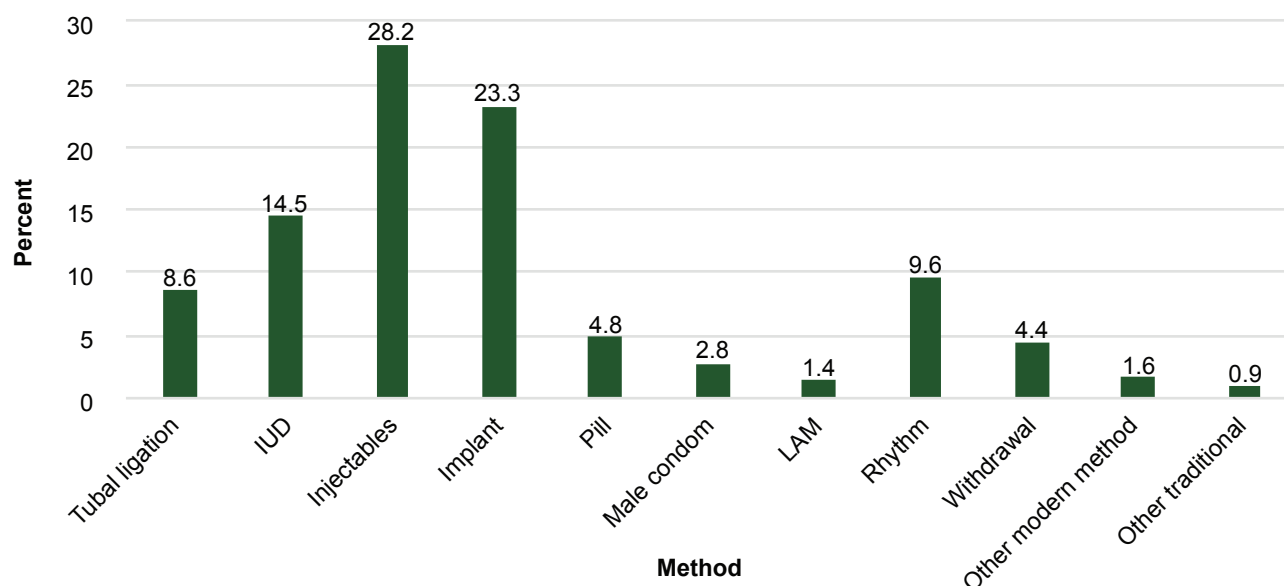
| | Total (%) |
|--------------------------------------|--------------|
| Preferred Method | |
| Female sterilization, tubal ligation | 8.6 |
| IUD | 14.5 |
| Injectables | 28.2 |
| Implant | 23.3 |
| Pill | 4.8 |
| Male condom | 2.8 |
| LAM | 1.4 |
| Rhythm | 9.6 |
| Withdrawal | 4.4 |
| Other modern method | 1.6 |
| Other traditional method | 0.9 |
| Total | 100.0 |
| Number of women | 75 |

Abbreviations: IUD, intrauterine device; LAM, lactational amenorrhea method.

Source: 2014 Kigoma Reproductive Health Survey.

^aExcludes users of male/female sterilization.

Figure 4.11: Preferred Method Among Current Contraceptive Users Aged 15-49^a Years Who Would Prefer a Different Method (Percent)



Abbreviations, IUD, intrauterine device; LAM, lactational amenorrhea.

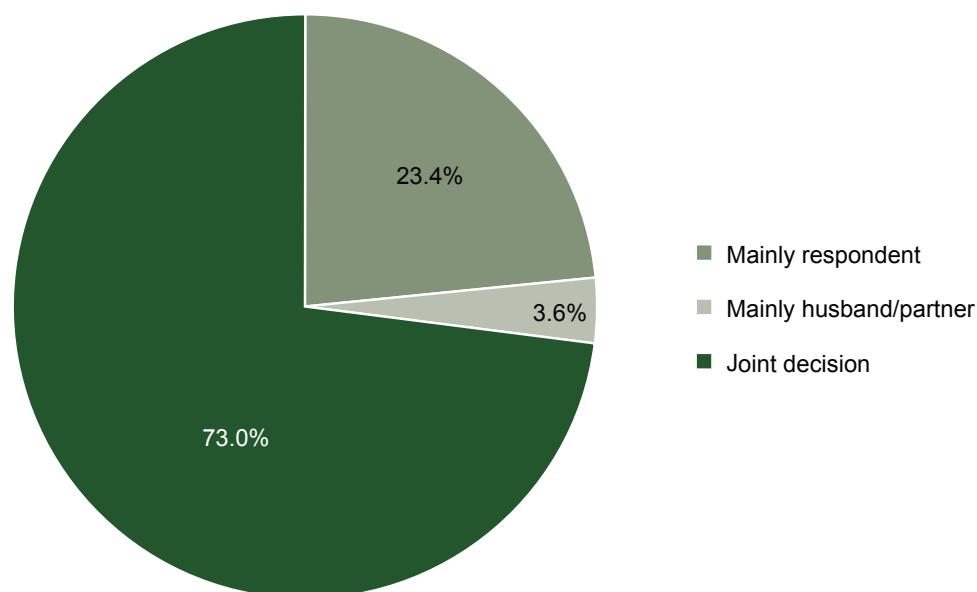
Source: 2014 Kigoma Reproductive Health Survey.

^a Excludes users of male/female sterilization.

4.10 Contraceptive Decision Making Among Current Users

In Kigoma, decisions about contraception were largely joint decisions made by both wife and husband; 73.0% of women in union who were currently using a modern method (except tubal ligation) reported that they and their husband or partner decided together about contraception (Figure 4.12, Table 4.14). About one-quarter of women said that contraceptive decisions were mostly their own (23.4%), and only 3.6% of women reported that contraceptive decisions were made mainly by their husband or partner.

Figure 4.12: Decision Making About Contraceptive Use Among Women Aged 15-49 Years Who Were Current Modern Method Users^a (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

^a Excludes users of male/female sterilization.

Table 4.14: Decision Making Regarding Contraceptive Method Use (Percent Distribution)
 Women in Union Aged 15-49 Years Who Are Currently Using a Modern Method^a

| | Who Decides to Use a Modern Method of Contraception (%) | | | Total | Number of Women |
|------------------------------|---|------------------------|----------------|-------|-----------------|
| | Mainly Respondent | Mainly Husband/Partner | Joint Decision | | |
| Residence | | | | | |
| Urban | 24.0 | 3.7 | 72.2 | 100.0 | 82 |
| Rural | 23.2 | 3.5 | 73.3 | 100.0 | 251 |
| Age group (yr) | | | | | |
| 15-19 | b | b | b | 100.0 | 8 |
| 20-24 | 19.6 | 5.4 | 75.0 | 100.0 | 61 |
| 25-29 | 20.7 | 3.4 | 75.9 | 100.0 | 70 |
| 30-34 | 27.3 | 2.7 | 70.0 | 100.0 | 82 |
| 35-39 | 26.1 | 3.6 | 70.2 | 100.0 | 66 |
| 40-44 | 23.7 | 3.8 | 72.6 | 100.0 | 40 |
| 45-49 | b | b | b | 100.0 | 6 |
| Education level | | | | | |
| No education | 26.5 | 10.4 | 63.0 | 100.0 | 68 |
| Some primary | 23.5 | 2.7 | 73.8 | 100.0 | 44 |
| Completed primary | 25.0 | 0.8 | 74.2 | 100.0 | 188 |
| Attended secondary or higher | 8.0 | 5.1 | 86.9 | 100.0 | 33 |
| Current contraceptive use | | | | | |
| IUD | b | b | b | 100.0 | 7 |
| Injectables | 26.1 | 3.7 | 70.1 | 100.0 | 221 |
| Implant | 21.1 | 4.2 | 74.7 | 100.0 | 46 |
| Pill | 27.3 | 0.0 | 72.7 | 100.0 | 39 |
| Male Condom | b | b | b | 100.0 | 19 |
| LAM | b | b | b | 100.0 | 1 |
| Total | 23.4 | 3.6 | 73.0 | 100.0 | 333 |

Abbreviations: IUD, intrauterine device; LAM, lactational amenorrhea method.

Source: 2014 Kigoma Reproductive Health Survey.

^a Excludes users of male/female sterilization.

^b Fewer than 25 cases.

This decision-making pattern was true for all leading contraceptive methods, although a larger percentage of women using injectables and pills as compared with implants reported that the decision was mainly their own (injectables, 26.1%; pills, 27.3%; implants, 21.1%).

4.11 Reasons for Non-Use of Contraception

The majority of all women of reproductive age in Kigoma (84.5%) were not using any method of contraception. Among women in union, nearly 80% were not using any contraception, modern or traditional. Many women in union were not using contraception because they wished to get pregnant (23.4%) or had other health or medical reasons (6.8%)(Table 4.15, Figure 4.13). However, for nearly a quarter of women in union (22.8%) who were not using contraceptives, the most important reason was their fear of side effects. Other commonly mentioned reasons were that the woman opposed contraceptives (7.8%) or that her husband/partner opposed them (11.4%), and that the woman lacked information on methods (5.3%).

Table 4.15: Reasons for Non-Use of Contraceptives (Percent)

Women Aged 15-49 Years at Risk of Pregnancy^a and Not Currently Using Contraception^b

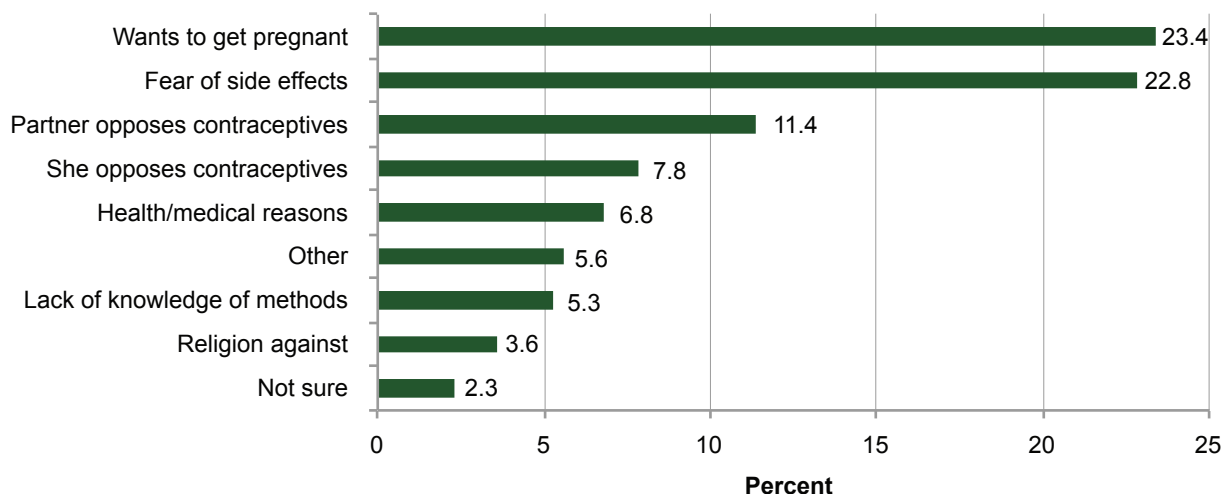
| | Wants to Get Pregnant | Health/Medical Reasons | She Opposes Contraceptives | Partner Opposes Contraceptives | Partner Wants Her to Become Pregnant | Health Concerns | Fear of Side Effects | Source Far Away | Lack of Knowledge of Methods | Lack of Knowledge of Source | Lack of Access/Too Far | Cannot Afford Cost | Provider/Pharmacist Will Not Give to Them | Religion Against | Fatalistic | Other | Not Sure | Number of Women |
|-----------------------------|-----------------------|------------------------|----------------------------|--------------------------------|--------------------------------------|-----------------|----------------------|-----------------|------------------------------|-----------------------------|------------------------|--------------------|---|------------------|------------|------------|------------|-----------------|
| Residence | | | | | | | | | | | | | | | | | | |
| Urban | 14.0 | 5.9 | 1.5 | 3.2 | 3.0 | 1.9 | 14.7 | 0.1 | 3.8 | 0.5 | 0.0 | 0.0 | 0.0 | 2.7 | 2.6 | 5.5 | 0.8 | 430 |
| Rural | 14.5 | 3.8 | 5.5 | 7.8 | 1.8 | 1.5 | 15.4 | 0.4 | 4.2 | 0.1 | 0.2 | 0.1 | 0.3 | 3.0 | 2.3 | 5.5 | 3.0 | 1,544 |
| Age group (yr) | | | | | | | | | | | | | | | | | | |
| 15-19 | 6.5 | 0.3 | 1.2 | 0.9 | 0.7 | 0.0 | 3.1 | 0.5 | 3.0 | 0.5 | 0.0 | 0.0 | 0.0 | 1.3 | 0.6 | 6.1 | 3.1 | 533 |
| 20-24 | 14.1 | 2.9 | 4.6 | 7.9 | 3.0 | 0.8 | 14.3 | 0.0 | 5.1 | 0.0 | 0.3 | 0.0 | 0.8 | 3.0 | 2.2 | 4.2 | 2.5 | 377 |
| 25-29 | 20.3 | 5.8 | 5.8 | 11.2 | 3.8 | 2.1 | 23.5 | 1.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.3 | 1.6 | 4.3 | 5.1 | 0.6 | 294 |
| 30-34 | 26.2 | 5.2 | 5.8 | 11.1 | 2.0 | 2.2 | 24.7 | 0.4 | 3.0 | 0.0 | 0.3 | 0.0 | 0.0 | 4.0 | 1.7 | 5.3 | 1.6 | 242 |
| 35-39 | 16.8 | 10.7 | 5.7 | 8.2 | 1.8 | 3.7 | 23.7 | 0.0 | 3.7 | 0.0 | 0.4 | 0.0 | 0.0 | 3.5 | 5.2 | 5.8 | 2.0 | 229 |
| 40-44 | 12.4 | 7.7 | 8.5 | 10.0 | 1.8 | 4.4 | 18.2 | 0.6 | 5.9 | 0.0 | 0.0 | 0.9 | 0.0 | 4.5 | 2.3 | 6.2 | 5.6 | 203 |
| 45-49 | 15.9 | 6.3 | 11.3 | 5.9 | 1.6 | 1.2 | 20.8 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 | 10.6 | 2.5 | 8.4 | 3.0 | 96 |
| Current union status | | | | | | | | | | | | | | | | | | |
| Currently in union | 23.4 | 6.8 | 7.8 | 11.4 | 3.5 | 2.6 | 22.8 | 0.4 | 5.3 | 0.0 | 0.2 | 0.1 | 0.2 | 3.6 | 3.3 | 5.6 | 2.3 | 1,147 |
| Not currently in union | 2.9 | 0.9 | 0.7 | 1.0 | 0.1 | 0.2 | 5.5 | 0.3 | 2.6 | 0.3 | 0.0 | 0.0 | 0.2 | 2.1 | 1.1 | 5.4 | 2.8 | 827 |
| Education level | | | | | | | | | | | | | | | | | | |
| No education | 17.9 | 4.9 | 6.8 | 9.2 | 2.6 | 0.9 | 20.2 | 0.4 | 6.5 | 0.0 | 0.0 | 0.0 | 0.1 | 3.6 | 4.1 | 6.7 | 1.8 | 480 |
| Some primary | 14.3 | 2.8 | 4.4 | 6.9 | 1.8 | 1.4 | 16.3 | 0.9 | 4.5 | 0.3 | 0.0 | 0.0 | 0.5 | 3.1 | 2.0 | 5.7 | 1.9 | 309 |
| Completed primary | 13.8 | 4.9 | 4.6 | 7.1 | 1.8 | 1.9 | 14.2 | 0.3 | 3.6 | 0.1 | 0.3 | 0.2 | 0.2 | 2.9 | 1.7 | 4.7 | 3.2 | 944 |
| Secondary or higher | 10.4 | 2.3 | 1.3 | 1.3 | 1.9 | 1.5 | 8.1 | 0.0 | 0.6 | 0.4 | 0.0 | 0.0 | 0.0 | 1.6 | 1.8 | 6.5 | 2.1 | 241 |
| Wealth tercile | | | | | | | | | | | | | | | | | | |
| Low | 14.5 | 4.0 | 5.0 | 9.5 | 2.1 | 1.0 | 17.7 | 1.0 | 5.1 | 0.0 | 0.3 | 0.2 | 0.6 | 3.7 | 3.2 | 6.5 | 2.8 | 639 |
| Middle | 14.0 | 4.0 | 6.2 | 7.2 | 1.3 | 1.7 | 16.4 | 0.1 | 4.6 | 0.1 | 0.0 | 0.0 | 0.0 | 2.7 | 2.5 | 4.6 | 3.1 | 623 |
| High | 14.7 | 4.6 | 3.1 | 4.1 | 2.6 | 1.9 | 11.9 | 0.0 | 2.7 | 0.3 | 0.1 | 0.0 | 0.0 | 2.5 | 1.4 | 5.6 | 1.6 | 712 |
| Total | 14.4 | 4.2 | 4.7 | 6.8 | 2.0 | 1.6 | 15.2 | 0.4 | 4.1 | 0.2 | 0.1 | 0.1 | 0.2 | 2.9 | 2.3 | 5.5 | 2.5 | 1,974 |

Source: 2014 Kigoma Reproductive Health Survey.

^a At risk of pregnancy defined as fecund, sexually active women who are not currently pregnant/amenorrheic.

^b Four cases missing.

Figure 4.13: Main Reasons for Not Using Contraception Among Women In Union Aged 15-49 Years at Risk of Pregnancy Who Were Not Using Contraception (Percent)

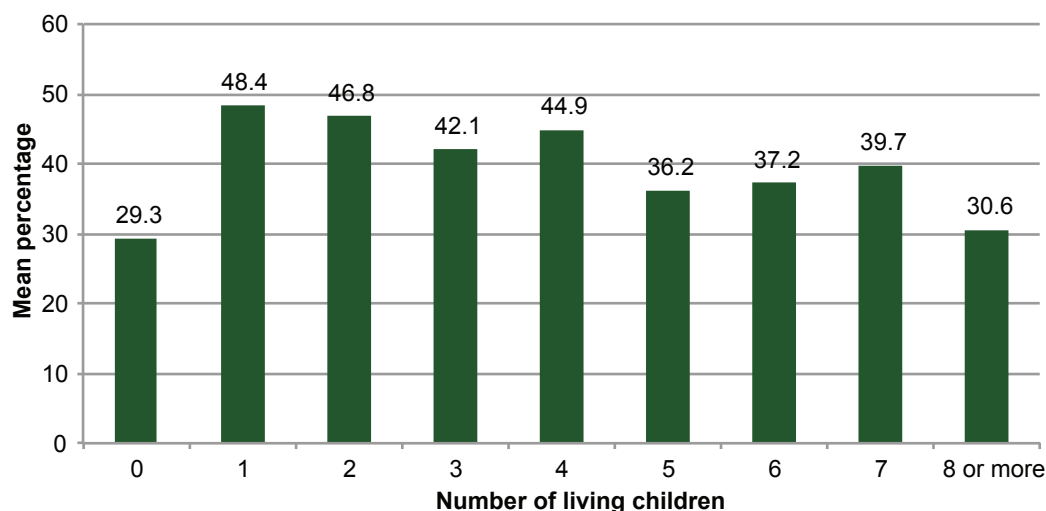


Source: 2014 Kigoma Reproductive Health Survey.

4.12 Future Intentions of Non-Users and Preferred Method

Fecund women who were not using contraception at the time of the survey were asked if they thought they might use a method at some time in the future. Nearly half (47.0%) said they would not, and 15.2% said they were not sure (data not shown). Thirty-eight percent of women, however, indicated they thought they would use a method at some point (Table 4.16). Interestingly, more women with one to four children indicated an intention to use contraception than women who had more children (five+ children); more than 40% of women with one to four children intended to use contraception, whereas fewer than 40% of women with five or more children planned to use contraception (Figure 4.14). Only 29.3% of childless women intended to use contraception in the future.

Figure 4.14: Intended Future Use of Contraception by Number of Living Children Among Women Aged 15-49 Years Who Were Fertile Current Non-Users (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 4.16: Intended Future Use of Contraception, by Number of Living Children (Percent)
 Women Aged 15-49 Years Who Are Fecund, Current Non-Contraceptive Users

| | Thinks She Will Use Contraception in the Future (%) | Number of Women |
|---------------------------|---|-----------------|
| Number of Living Children | | |
| 0 | 29.3 | 1,001 |
| 1 | 48.4 | 377 |
| 2 | 46.8 | 318 |
| 3 | 42.1 | 280 |
| 4 | 44.9 | 295 |
| 5 | 36.2 | 234 |
| 6 | 37.2 | 188 |
| 7 | 39.7 | 166 |
| 8 or more | 30.6 | 150 |
| Total | 37.8 | 3,009 |

Source: 2014 Kigoma Reproductive Health Survey.

Among those women who were currently not using contraception but intended to at some time in the future, the decided preference was for the injectable, which was preferred by nearly half (47.0%) of them (Table 4.17). Intended injectable use was particularly favored by those in the lowest wealth tercile and women in their 20s and early 30s. Current non-users of contraception were also interested in the implant (12.6%) and the pill (10.7%). There was some interest in tubal ligation (4.9%) and in the traditional method of rhythm (6.3%, with women in the highest wealth tercile having more interest than those in the other terciles).

Table 4.17: Preferred Method of Future Contraception, by Selected Characteristics (Percent Distribution)
 Women Aged 15-49 Years Who Are Fecund, Current Non-Contraceptive Users and Who Think They Will Use a Method in the Future

| Preferred Method (%) | | | | | | | | | | | | | | | | |
|----------------------|----------------|-----------|-----|-------------|---------|------|-------------|---------------|------------|--------|------------|---------------------|--------------------------|-----------|-------|-----------------|
| | Tubal Ligation | Vasectomy | IUD | Injectables | Implant | Pill | Male Condom | Female Condom | Foam/Jelly | Rhythm | Withdrawal | Other Modern Method | Other Traditional Method | Undecided | Total | Number of Women |
| Residence | | | | | | | | | | | | | | | | |
| Urban | 2.8 | 0.0 | 2.2 | 43.9 | 13.2 | 9.3 | 2.8 | 0.0 | 0.0 | 12.2 | 1.6 | 0.6 | 0.5 | 10.8 | 100.0 | 237 |
| Rural | 5.5 | 0.2 | 1.4 | 47.8 | 12.4 | 11.0 | 1.9 | 0.1 | 0.1 | 4.8 | 1.6 | 0.0 | 0.6 | 12.5 | 100.0 | 885 |
| Age group (yr) | | | | | | | | | | | | | | | | |
| 15-19 | 0.0 | 0.0 | 1.3 | 41.2 | 11.1 | 17.2 | 4.2 | 0.0 | 0.0 | 8.3 | 1.3 | 0.0 | 0.0 | 15.4 | 100.0 | 249 |
| 20-24 | 1.4 | 0.0 | 1.1 | 50.9 | 14.3 | 9.3 | 2.9 | 0.0 | 0.2 | 5.5 | 1.3 | 0.5 | 0.4 | 12.2 | 100.0 | 273 |
| 25-29 | 1.6 | 0.0 | 1.9 | 53.2 | 15.7 | 7.1 | 1.3 | 0.0 | 0.0 | 7.2 | 2.0 | 0.0 | 1.2 | 8.7 | 100.0 | 220 |
| 30-34 | 3.1 | 0.6 | 2.8 | 52.7 | 13.3 | 5.6 | 0.4 | 0.0 | 0.0 | 4.4 | 2.1 | 0.0 | 0.7 | 14.4 | 100.0 | 162 |
| 35-39 | 21.8 | 0.7 | 1.5 | 38.4 | 8.0 | 9.7 | 0.0 | 0.0 | 0.0 | 7.7 | 1.7 | 0.0 | 0.8 | 9.7 | 100.0 | 143 |
| 40-44 | 24.1 | 0.0 | 1.0 | 36.2 | 6.8 | 17.9 | 0.0 | 1.8 | 0.0 | 0.7 | 2.5 | 0.0 | 1.8 | 7.1 | 100.0 | 63 |
| 45-49 | a | a | a | a | a | a | a | a | a | a | a | a | a | a | 100.0 | 12 |
| Education level | | | | | | | | | | | | | | | | |
| No education | 5.2 | 0.0 | 3.4 | 48.5 | 12.1 | 11.2 | 1.3 | 0.4 | 0.0 | 2.6 | 1.0 | 0.0 | 1.2 | 13.2 | 100.0 | 250 |
| Some primary | 5.3 | 0.0 | 0.4 | 51.8 | 16.1 | 10.2 | 4.4 | 0.0 | 0.0 | 2.7 | 0.3 | 0.0 | 1.4 | 7.4 | 100.0 | 157 |
| Completed primary | 6.1 | 0.3 | 1.0 | 49.3 | 10.7 | 10.5 | 1.6 | 0.0 | 0.1 | 4.6 | 2.4 | 0.3 | 0.3 | 12.9 | 100.0 | 556 |
| Secondary or higher | 0.0 | 0.0 | 1.8 | 31.3 | 16.2 | 10.9 | 2.7 | 0.0 | 0.0 | 22.3 | 1.6 | 0.0 | 0.0 | 13.1 | 100.0 | 159 |
| Wealth tercile | | | | | | | | | | | | | | | | |
| Low | 5.3 | 0.0 | 1.7 | 55.1 | 10.5 | 11.7 | 1.3 | 0.3 | 0.2 | 1.3 | 0.5 | 0.0 | 0.6 | 11.5 | 100.0 | 336 |
| Middle | 6.4 | 0.5 | 1.3 | 47.9 | 11.9 | 10.6 | 2.2 | 0.0 | 0.0 | 4.8 | 2.6 | 0.0 | 0.7 | 11.1 | 100.0 | 379 |
| High | 3.3 | 0.0 | 1.6 | 39.1 | 15.0 | 9.8 | 2.6 | 0.0 | 0.0 | 12.1 | 1.7 | 0.4 | 0.5 | 13.7 | 100.0 | 407 |
| Total | 4.9 | 0.2 | 1.6 | 47.0 | 12.6 | 10.7 | 2.1 | 0.1 | 0.1 | 6.3 | 1.6 | 0.1 | 0.6 | 12.2 | 100.0 | 1,122 |

Abbreviation: IUD, intrauterine device.
Source: 2014 Kigoma Reproductive Health Survey.

Fewer than 25 cases.

4.13 Unmet Need for Contraception

Fecund women who indicated that they either 1) wanted no more children or 2) wanted to wait 2 or more years before having a(nother) child, but were not currently using any method of contraception, were considered to have an unmet need for family planning services. Current users of any method of contraception were considered to have a met need for family planning services. Women with unmet need, combined with those with met need, constituted the total demand for family planning. In this report, the definition of unmet need corresponds to the standard DHS definition.¹

Table 4.18 presents levels of unmet and met need, total demand, and satisfied demand for family planning among women in union surveyed in Kigoma Region. In total, 39.2% of women in union had an unmet need for family planning services, including 32.3% for spacing and 6.8% for limiting. As shown in Table 4.4, 20.6% of women in union were currently using contraception and, therefore, had met their need for family planning services. Approximately 60% of women in union in Kigoma had a need for family planning services, but only 34% of that demand was satisfied. Among women classified by the number of living children, the percentage of demand that was satisfied increased from just 7.6% among women with no children to a maximum of 42.0% among women with three living children, after which it declined with increases in the number of living children.

Rural women had a higher level of unmet need for family planning services than did urban women (40.7% rural vs 32.0% urban), and women in the lowest wealth tercile had a higher level of need than did women in the middle and highest terciles, even though most contraceptives could be obtained free of charge.

Table 4.18: Unmet Need, Met Need, and Demand for Family Planning Services, by Selected Characteristics (Percent)
Women in Union Aged 15-49 Years

| | Unmet Need for Family Planning | | | Met Need for Family Planning | | | Total Demand for Family Planning | | | Satisfied Demand ^a | | Number of Women |
|----------------------------------|--------------------------------|------------|-------------|------------------------------|-------------|-------------|----------------------------------|-------------|-------------|-------------------------------|--|-----------------|
| | Spacing | Limiting | Total | Spacing | Limiting | Total | Spacing | Limiting | Total | Total | | |
| Residence | | | | | | | | | | | | |
| Urban | 26.6 | 5.3 | 32.0 | 21.0 | 8.6 | 29.6 | 47.6 | 14.0 | 61.6 | 48.1 | | 475 |
| Rural | 33.6 | 7.1 | 40.7 | 13.8 | 4.9 | 18.7 | 47.3 | 12.1 | 59.4 | 31.5 | | 2,069 |
| Education level | | | | | | | | | | | | |
| No education | 34.1 | 6.8 | 40.9 | 10.0 | 3.9 | 13.9 | 44.1 | 10.7 | 54.8 | 25.4 | | 741 |
| Some primary | 32.4 | 8.2 | 40.6 | 14.2 | 4.7 | 18.9 | 46.6 | 12.9 | 59.4 | 31.8 | | 373 |
| Completed primary | 31.5 | 6.9 | 38.4 | 16.4 | 6.8 | 23.2 | 47.9 | 13.7 | 61.6 | 37.7 | | 1,280 |
| Secondary or higher | 29.9 | 2.9 | 32.8 | 32.5 | 5.8 | 38.3 | 62.4 | 8.7 | 71.1 | 53.9 | | 150 |
| Wealth tercile | | | | | | | | | | | | |
| Low | 35.4 | 7.6 | 42.9 | 12.2 | 3.3 | 15.5 | 47.6 | 10.9 | 58.5 | 26.5 | | 847 |
| Middle | 31.6 | 5.7 | 37.3 | 15.7 | 4.2 | 19.9 | 47.3 | 9.9 | 57.2 | 34.8 | | 887 |
| High | 29.9 | 7.3 | 37.2 | 17.4 | 9.6 | 27.0 | 47.3 | 16.9 | 64.2 | 42.1 | | 810 |
| Age group (yr) | | | | | | | | | | | | |
| 15-19 | 37.3 | 1.9 | 39.1 | 7.5 | 0.0 | 7.5 | 44.7 | 1.9 | 46.6 | 16.1 | | 146 |
| 20-24 | 32.9 | 2.7 | 35.6 | 20.4 | 0.5 | 20.9 | 53.2 | 3.2 | 56.5 | 37.0 | | 440 |
| 25-29 | 37.3 | 3.4 | 40.7 | 18.6 | 2.3 | 20.9 | 56.0 | 5.7 | 61.7 | 33.9 | | 534 |
| 30-34 | 37.8 | 5.1 | 42.8 | 20.3 | 3.3 | 23.7 | 58.1 | 8.4 | 66.5 | 35.6 | | 437 |
| 35-39 | 29.5 | 11.0 | 40.5 | 14.1 | 10.6 | 24.6 | 43.6 | 21.5 | 65.1 | 37.8 | | 416 |
| 40-44 | 24.3 | 17.0 | 41.3 | 8.0 | 16.5 | 24.4 | 32.3 | 33.4 | 65.7 | 37.1 | | 348 |
| 45-49 | 19.5 | 11.0 | 30.6 | 0.0 | 10.5 | 10.5 | 19.5 | 21.6 | 41.1 | 25.5 | | 223 |
| Number of living children | | | | | | | | | | | | |
| 0 | 27.6 | 1.5 | 29.1 | 2.4 | 0.0 | 2.4 | 30.1 | 1.5 | 31.5 | 7.6 | | 172 |
| 1 | 32.2 | 1.6 | 33.8 | 15.9 | 0.0 | 15.9 | 48.1 | 1.6 | 49.7 | 32.0 | | 316 |
| 2 | 35.3 | 2.4 | 37.7 | 23.5 | 2.0 | 25.5 | 58.8 | 4.4 | 63.2 | 40.3 | | 348 |
| 3 | 35.1 | 4.1 | 39.2 | 24.4 | 4.0 | 28.4 | 59.6 | 8.0 | 67.6 | 42.0 | | 342 |
| 4 | 35.8 | 6.9 | 42.7 | 14.0 | 7.4 | 21.4 | 49.8 | 14.3 | 64.1 | 33.4 | | 356 |
| 5 | 34.3 | 4.1 | 38.4 | 17.3 | 5.4 | 22.7 | 51.6 | 9.5 | 61.1 | 37.2 | | 302 |
| 6 | 27.8 | 12.0 | 39.8 | 13.0 | 11.8 | 24.8 | 40.8 | 23.8 | 64.6 | 38.4 | | 267 |
| 7 | 33.5 | 15.5 | 49.0 | 7.7 | 9.2 | 16.9 | 41.2 | 24.7 | 65.9 | 25.6 | | 218 |
| 8 or more | 22.5 | 21.3 | 43.8 | 2.5 | 14.8 | 17.3 | 25.0 | 36.1 | 61.1 | 28.3 | | 223 |
| Total | 32.3 | 6.8 | 39.2 | 15.1 | 5.6 | 20.6 | 47.4 | 12.4 | 59.8 | 34.4 | | 2,544 |
| Tanzania | 15.9 | 9.5 | 25.3 | 20.7 | 13.6 | 34.4 | 36.6 | 23.1 | 59.7 | 57.5 | | 6,412 |

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

^a Satisfied demand = total met need divided by total demand for family planning services.

Reference

1. The United Republic of Tanzania National Bureau of Statistics, ORC Macro. *Tanzania Demographic and Health Survey 2010*. Dar es Salaam, Tanzania: National Bureau of Statistics, ORC Macro; 2011.

CHAPTER 5: MATERNAL AND PERINATAL HEALTH

High quality maternal and perinatal health services are essential to reducing maternal and neonatal mortality. This chapter presents findings related to maternal and perinatal health in Kigoma including information on the use of antenatal, maternity, and postnatal care services. This information is derived from the reports of survey respondents as recorded in their lifetime pregnancy histories and the detailed histories of their health care utilization for all births carried to term since January 2009. The findings from this section can be used to identify problem areas; determine needed interventions; and set program priorities, targets, and goals to improve maternal and perinatal health outcomes.

5.1 Antenatal Care

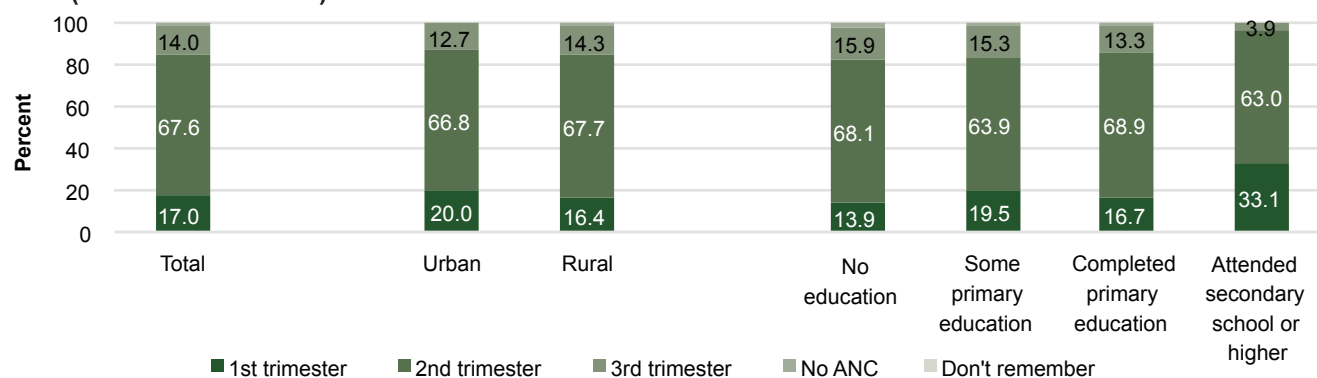
Antenatal care (ANC) is essential for preventing and treating conditions that may cause complications in pregnancy and affect the health of the mother and her fetus. The World Health Organization (WHO) recommends all pregnant women have at least four ANC assessments by a skilled attendant, starting as early in pregnancy as possible.¹ These visits should, at a minimum, include advising on warning signs in pregnancy; assessing the woman's risk factors; screening and treatment for health conditions; educating the woman and her partner on various topics, such as nutrition and self-care; preparing a birth plan; and counseling on family planning. The 2010 Kigoma Reproductive Health Survey (RHS) collected information on ANC attendance, timing, and location, and the content of the services provided for 4,121 live births and stillbirths that took place between January 2009 and the date of the RHS interview in August or September 2014.

Antenatal Care Coverage

Overall, coverage of ANC was almost universal in Kigoma Region, with only 0.8% of women reporting no ANC (Table 5.1). Differences in coverage based upon location of residence, age, and level of education were negligible. While coverage of ANC was high, only 17.0% of women began care in the first trimester, as recommended by the WHO guidelines. Overall, about two-thirds of women sought their first ANC visit during the second trimester (67.6%), with little difference by residence, wealth status, or education. Greater proportions of women with higher education and in the highest wealth tercile sought care in the first trimester (33.1% and 20.4%, respectively) than did women with less education or lower wealth status (Figure 5.1, Table 5.1). There were no discernable changes in timing of first visits based on year of birth since 2009.

Fewer than half of all women (42.1%) attended four or more antenatal visits, as recommended by the WHO, although attendance was higher among women living in urban settings (47.2%), those who attended secondary school or higher (60.4%), and those with higher wealth status (51.3%).

Figure 5.1: Timing of First Antenatal Care Visit Among Women Aged 15-49 Years, for Births Since January 2009 (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

Table 5.1: Receipt of Any Antenatal Care and 4+ Visits (Percent) and Timing of First Visit (Percent Distribution)
Births Since January 2009, of Women Aged 15-49 Years

| | ANC (%) | | Timing of First ANC (%) | | | | | | Number of Births |
|------------------------------|------------------|----------------------------|-------------------------|------------------|-----------------|---------------|--------|-------|------------------|
| | Received Any ANC | 4+ ANC Visits ^a | First Trimester | Second Trimester | Third Trimester | DNR Trimester | No ANC | Total | |
| Residence | | | | | | | | | |
| Urban | 99.7 | 47.2 | 20.0 | 66.8 | 12.7 | 0.2 | 0.3 | 100.0 | 671 |
| Rural | 99.1 | 41.1 | 16.4 | 67.7 | 14.3 | 0.7 | 0.9 | 100.0 | 3,450 |
| Age group (yr) at birth | | | | | | | | | |
| < 25 | 99.4 | 39.2 | 18.4 | 67.0 | 13.7 | 0.3 | 0.6 | 100.0 | 1,597 |
| 25-34 | 99.1 | 45.7 | 16.2 | 68.5 | 13.4 | 1.0 | 0.9 | 100.0 | 1,706 |
| 35-49 | 99.1 | 40.7 | 15.5 | 66.8 | 16.2 | 0.6 | 0.9 | 100.0 | 818 |
| Education level | | | | | | | | | |
| No education | 98.5 | 40.7 | 13.9 | 68.1 | 15.9 | 0.7 | 1.5 | 100.0 | 1,316 |
| Some primary | 99.1 | 42.3 | 19.5 | 63.9 | 15.3 | 0.5 | 0.9 | 100.0 | 617 |
| Completed primary | 99.7 | 41.2 | 16.7 | 68.9 | 13.3 | 0.7 | 0.3 | 100.0 | 1,999 |
| Attended secondary or higher | 100.0 | 60.4 | 33.1 | 63.0 | 3.9 | 0.0 | 0.0 | 100.0 | 189 |
| Wealth tercile | | | | | | | | | |
| Low | 98.8 | 36.8 | 14.6 | 67.3 | 16.4 | 0.4 | 1.2 | 100.0 | 1,486 |
| Middle | 99.4 | 40.3 | 16.6 | 68.1 | 13.7 | 0.9 | 0.6 | 100.0 | 1,472 |
| High | 99.6 | 51.3 | 20.4 | 67.3 | 11.3 | 0.6 | 0.4 | 100.0 | 1,163 |
| Year pregnancy ended | | | | | | | | | |
| 2009 | 99.2 | 40.5 | 15.1 | 69.1 | 14.2 | 0.8 | 0.8 | 100.0 | 695 |
| 2010 | 99.5 | 44.7 | 16.1 | 70.3 | 12.1 | 1.0 | 0.5 | 100.0 | 708 |
| 2011 | 98.7 | 42.0 | 17.8 | 65.2 | 15.1 | 0.6 | 1.3 | 100.0 | 697 |
| 2012 | 99.0 | 42.8 | 15.5 | 68.9 | 14.0 | 0.7 | 1.0 | 100.0 | 726 |
| 2013 | 99.5 | 46.1 | 20.0 | 66.6 | 12.7 | 0.1 | 0.5 | 100.0 | 746 |
| 2014 | 99.4 | 34.5 | 17.1 | 64.9 | 16.8 | 0.6 | 0.6 | 100.0 | 549 |
| Total | 99.2 | 42.1 | 17.0 | 67.6 | 14.0 | 0.6 | 0.8 | 100.0 | 4,121 |
| Tanzania | 98.0 | 42.8 | 15.1 | N/A | N/A | 0.0 | 2.0 | 100.0 | 5,519 |

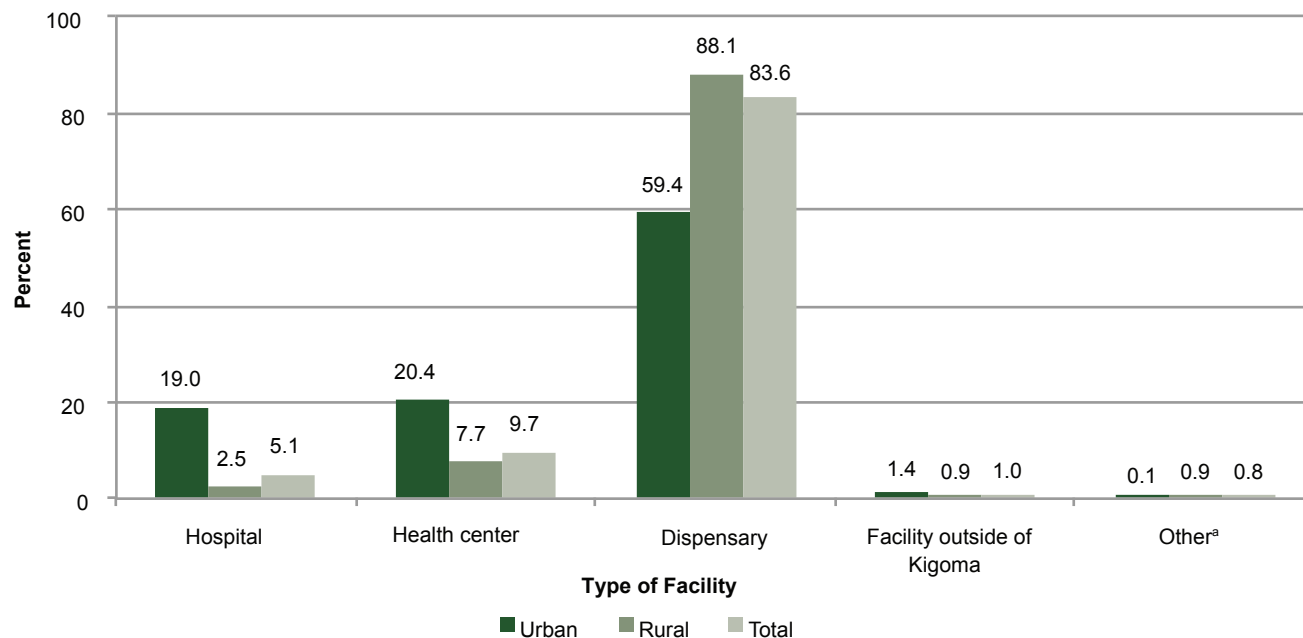
Abbreviations: ANC, antenatal care; DNR, did not remember.

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

^a Thirty women receiving ANC were unsure about the number of visits.

In urban settings, more than half of women used dispensaries for ANC (59.4%), and an even higher percentage did so in rural settings (88.1%) (Figure 5.2, Table 5.2). Only 1% of women received ANC at a facility outside of Kigoma Region. A greater percentage of women in urban settings and those with higher wealth status went to hospitals and health centers for ANC.

Figure 5.2: Location of Antenatal Care Among Women Aged 15-49 Years, for Births Since January 2009, by Residence (Percent Distribution)



^a Other includes home, community-based distribution, community health worker, traditional birth attendant, other.

Source: 2014 Kigoma Reproductive Health Survey.

Table 5.2: Place Antenatal Care Received, by Selected Characteristics (Percent)

Births Since January 2009 Receiving Antenatal Care, of Women Aged 15-49 Years

| | Hospital | Health Center | Dispensary | Facility Outside Kigoma | Home/CBD/ CHW/TBA/ Other | Number of Births |
|--------------------------------|------------|---------------|-------------|-------------------------|--------------------------|------------------|
| Residence | | | | | | |
| Urban | 19.0 | 20.4 | 59.4 | 1.4 | 0.1 | 668 |
| Rural | 2.5 | 7.7 | 88.1 | 0.9 | 0.9 | 3,415 |
| Age group (yr) at birth | | | | | | |
| < 25 | 4.8 | 11.0 | 82.1 | 1.2 | 0.9 | 1,587 |
| 25-34 | 6.0 | 9.6 | 83.0 | 0.9 | 0.8 | 1,687 |
| 35-49 | 3.7 | 6.9 | 88.5 | 0.7 | 0.3 | 809 |
| Education level | | | | | | |
| No education | 1.5 | 8.1 | 88.7 | 0.4 | 1.3 | 1,294 |
| Some primary | 5.0 | 12.4 | 79.8 | 2.4 | 0.5 | 611 |
| Completed primary | 5.3 | 9.6 | 83.9 | 0.8 | 0.4 | 1,989 |
| Attended secondary or higher | 28.1 | 12.9 | 56.2 | 1.5 | 1.8 | 189 |
| Wealth tercile | | | | | | |
| Low | 1.2 | 6.6 | 89.8 | 1.0 | 1.3 | 1,462 |
| Middle | 3.4 | 7.2 | 88.1 | 0.6 | 0.7 | 1,464 |
| High | 12.2 | 16.7 | 69.8 | 1.4 | 0.3 | 1,157 |
| Year pregnancy ended | | | | | | |
| 2009 | 6.3 | 10.8 | 81.5 | 0.6 | 0.7 | 689 |
| 2010 | 4.2 | 9.9 | 83.4 | 1.7 | 0.7 | 705 |
| 2011 | 4.9 | 8.1 | 85.3 | 1.1 | 0.6 | 687 |
| 2012 | 4.6 | 10.4 | 83.5 | 0.7 | 1.0 | 718 |
| 2013 | 5.3 | 9.2 | 84.1 | 0.8 | 0.8 | 739 |
| 2014 | 5.3 | 9.7 | 83.5 | 0.8 | 0.8 | 545 |
| Total | 5.1 | 9.7 | 83.6 | 1.0 | 0.8 | 4,083 |

Abbreviations: CBD, community-based distribution; CHW, community health worker; TBA, traditional birth attendant.

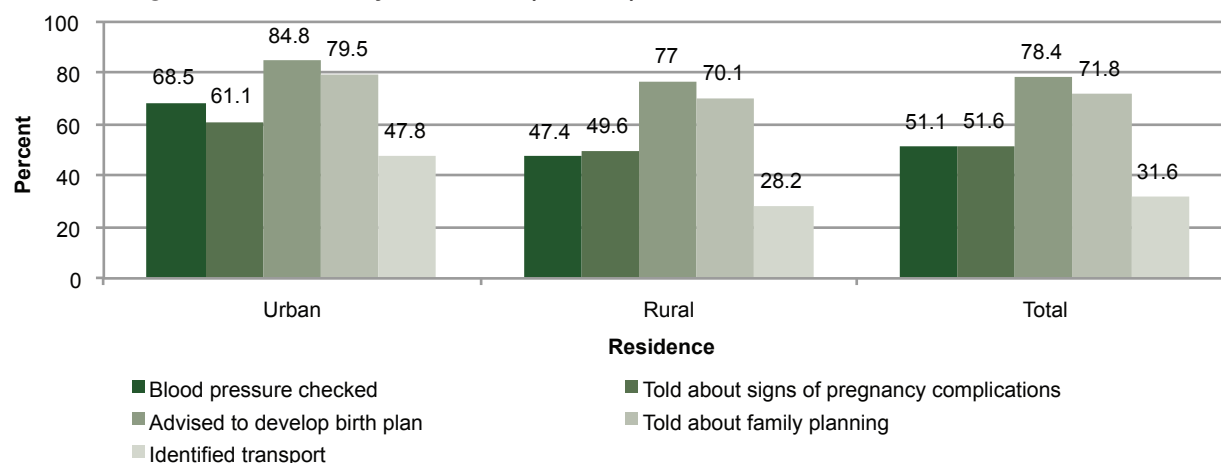
Source: 2014 Kigoma Reproductive Health Survey.

Antenatal Care Components

It is important to evaluate the quality of ANC services provided to pregnant women, given the crucial role such care can play in preventing pregnancy complications. To assess one aspect of quality, the Kigoma RHS collected information about services the women received in ANC visits for their most recent birth. Specifically, women were asked whether their ANC visits included an evaluation of their blood pressure, planning for delivery (birth plan, transport, money, blood donation, and skilled attendant), information on pregnancy complications, and family planning education.

Results showed that most women were advised to develop a birth plan (78.4%); urban women (84.8%), those with some secondary education (86.8%), and those with higher wealth status (84.5%) reported doing this more frequently than others (Table 5.3). Almost three-quarters of women were told about family planning (71.8%). Women in urban settings and those of higher wealth status reported this most frequently (79.5% and 76.2%, respectively). Nearly two-thirds of women reported they discussed plans to save money for delivery (62.2%). The number was higher in urban settings (71.4%), particularly among women who attended secondary school (84.8%) and those of higher wealth status (75.4%). Only half of all women reported having their blood pressure checked (51.1%), and only one-third reported being advised to identify transportation to a facility for delivery (31.6%). Few women reported discussion of identifying a birth attendant (10.2%) or blood donor (6.4%). Overall, women in urban settings reported more coverage of each of the components of ANC assessed (Figure 5.3).

Figure 5.3: Content of Antenatal Care Received for Most Recent Birth Since January 2009, of Women Aged 15-49 Years, by Residence (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 5.3: Content of Antenatal Care Received, by Selected Characteristics (Percent)

Most Recent Births Since January 2009 Receiving Antenatal Care, of Women Aged 15-49 Years

| | Blood Pressure Checked | Told About Signs of Pregnancy Complications | Told About Family Planning | Advised to Develop Birth Plan | Identified Transport | Saved Money for Delivery | Identified a Blood Donor | Identified a Skilled Attendant for Delivery | Number of Births |
|--------------------------------|------------------------|---|----------------------------|-------------------------------|----------------------|--------------------------|--------------------------|---|------------------|
| Residence | | | | | | | | | |
| Urban | 68.5 | 61.1 | 79.5 | 84.8 | 47.8 | 71.4 | 8.6 | 12.3 | 431 |
| Rural | 47.4 | 49.6 | 70.1 | 77.0 | 28.2 | 60.2 | 5.9 | 9.7 | 1,959 |
| Age group (yr) at birth | | | | | | | | | |
| < 25 | 48.7 | 50.6 | 65.7 | 77.1 | 34.6 | 66.1 | 5.0 | 9.5 | 835 |
| 25-34 | 51.7 | 52.9 | 76.0 | 80.0 | 30.4 | 60.6 | 7.6 | 9.9 | 963 |
| 35-49 | 54.3 | 51.1 | 74.4 | 77.8 | 28.7 | 58.2 | 6.4 | 11.8 | 592 |
| Education level | | | | | | | | | |
| No education | 41.5 | 44.5 | 67.1 | 71.3 | 23.7 | 51.2 | 5.8 | 8.3 | 686 |
| Some primary | 48.7 | 52.9 | 66.3 | 75.3 | 30.8 | 60.4 | 5.3 | 8.6 | 366 |
| Completed primary | 54.6 | 53.2 | 76.0 | 82.6 | 33.9 | 66.6 | 6.3 | 10.8 | 1,192 |
| Attended secondary or higher | 76.6 | 70.3 | 73.8 | 86.8 | 54.5 | 84.8 | 12.5 | 18.7 | 146 |
| Wealth tercile | | | | | | | | | |
| Low | 41.8 | 46.0 | 69.0 | 71.5 | 19.8 | 50.1 | 5.9 | 8.8 | 820 |
| Middle | 46.5 | 50.8 | 70.7 | 79.9 | 29.1 | 62.5 | 4.0 | 9.1 | 827 |
| High | 67.0 | 59.0 | 76.2 | 84.5 | 47.9 | 75.4 | 9.5 | 13.0 | 743 |
| Total | 51.1 | 51.6 | 71.8 | 78.4 | 31.6 | 62.2 | 6.4 | 10.2 | 2,390 |

Source: 2014 Kigoma Reproductive Health Survey.

Malaria poses a great risk to pregnant women. To prevent malaria in pregnancy, the WHO has recommended that ANC clinics (or other public or private facilities) provide insecticide-treated bed nets to women as early in the pregnancy as possible.² The WHO also recommends that pregnant women receive intermittent prophylactic treatment with sulfadoxine-pyrimethamine (IPTp-SP) starting in the second trimester, with at least 1 month between doses, during pregnancy. Tanzania has adopted this practice and recommends at least two doses of IPTp-SP provided along with subsidized bed nets.

In September 2012, the WHO Malaria Policy Advisory Committee reviewed the most recent evidence on efficacy and effectiveness of IPTp-SP and issued new policy recommendations that promote the increased use of IPTp-SP in all areas of Africa with moderate-to-high transmission of *Plasmodium falciparum* malaria, such as Kigoma Region. The WHO's recent policy update confirms the critical importance of scaling-up IPTp-SP use as part of routine ANC services.

In Kigoma Region, the majority (84.4%) of women reported sleeping under a bed net during their last pregnancy that resulted in a birth since 2009 (Table 5.4). Similarly, almost three-quarters of women (71.4%) recounted taking an antimalarial drug for prevention during pregnancy, with most taking IPTp-SP (96.0%; data not shown). Reported usage of both bed nets and IPTp-SP increased with age, education, and wealth. Although reported bed net use was similar among rural and urban women, a greater percentage of urban women reported taking antimalarial drugs (81.5%; rural, 69.3%).

Table 5.4: Use of Insecticide-Treated Bed Nets and Antimalarial Drugs During Pregnancy, by Selected Characteristics (Percent)

Most Recent Births Since January 2009, of Women Aged 15-49 Years

| | Usually Slept Under ITN (%) | Took Antimalarial Drugs (%) | Number of Births |
|--------------------------------|-----------------------------|-----------------------------|------------------|
| Residence | | | |
| Urban | 85.3 | 81.5 | 432 |
| Rural | 84.3 | 69.3 | 1,978 |
| Age group (yr) at birth | | | |
| < 25 | 83.9 | 67.6 | 838 |
| 25-34 | 84.1 | 72.6 | 972 |
| 35-49 | 86.0 | 75.8 | 600 |
| Education level | | | |
| No education | 81.6 | 65.5 | 697 |
| Some primary | 82.3 | 65.5 | 369 |
| Completed primary | 86.4 | 75.6 | 1,198 |
| Attended secondary or higher | 87.7 | 82.9 | 146 |
| Wealth tercile | | | |
| Low | 79.9 | 62.3 | 834 |
| Middle | 85.6 | 72.6 | 829 |
| High | 88.3 | 80.5 | 747 |
| Total | 84.4 | 71.4 | 2,410 |

Abbreviation: ITN, insecticide-treated bed net.

Source: 2014 Kigoma Reproductive Health Survey.

5.2 Use of Local Herbs During Pregnancy

Women were asked whether they took local herbs during their pregnancy. Previous research has found that herbal medications are commonly administered to pregnant women with complications before childbirth in Kigoma. These medications are believed to increase contractions and assist the women in delivering faster. Though the RHS did not ask which herbs were taken specifically, women with a birth since 2009 were asked if they took herbal remedies during their last pregnancy, and why.

Overall, 14.8% of women reported taking herbal remedies (Table 5.5). Rural women (15.4%), women aged 15-24 years (18.4%), and women with either no education (16.7%) or some primary education (22.8%) were the most frequent users of herbal medications. Reports of herb use declined as wealth levels increased (from 18.2% among women in the lowest wealth tercile to 10.3% among those in the highest). Women most commonly reported taking these medications to treat stomach pain (40.7%), to avoid miscarriage (25.8%), for the health of the child (16.0%), to induce labor (11.2%), and for vaginal bleeding (9.4%) (Table 5.6).

Table 5.5: Use of Local Herbs During Pregnancy, by Selected Characteristics (Percent)

Most Recent Births Since January 2009, of Women Aged 15-49 Years

| | Took Local Herbs (%) | Number of Births |
|--------------------------------|----------------------|------------------|
| Residence | | |
| Urban | 12.0 | 432 |
| Rural | 15.4 | 1,978 |
| Age group (yr) at birth | | |
| < 25 | 18.4 | 838 |
| 25-34 | 12.2 | 972 |
| 35-49 | 13.6 | 600 |
| Education level | | |
| No education | 16.7 | 697 |
| Some primary | 22.8 | 369 |
| Completed primary | 12.1 | 1,198 |
| Attended secondary or higher | 6.6 | 146 |
| Wealth tercile | | |
| Low | 18.2 | 834 |
| Middle | 15.4 | 829 |
| High | 10.3 | 747 |
| Total | 14.8 | 2,410 |

Source: 2014 Kigoma Reproductive Health Survey.

Table 5.6: Reasons for Taking Local Herbs During Pregnancy, by Selected Characteristics (Percent)

Most Recent Births Since January 2009 Where the Mother Took Herbs During Pregnancy, of Women Aged 15-49 Years

| | Reasons for Taking Herbs During Pregnancy (%) | | | | | | | | | Number of Births |
|------------------------------|---|---------|----------|----------|------------------|--------------|-----------------------------|----------------------|-------|------------------|
| | To Induce Labor | Malaria | Cold/Flu | Headache | Vaginal Bleeding | Stomach Pain | For the Health of the Child | To Avoid Miscarriage | Other | |
| Residence | | | | | | | | | | |
| Urban | 9.3 | 0.0 | 0.0 | 1.5 | 14.9 | 42.4 | 18.9 | 13.6 | 13.4 | 49 |
| Rural | 11.5 | 1.0 | 0.0 | 1.6 | 8.5 | 40.4 | 15.6 | 27.8 | 7.5 | 293 |
| Age group (yr) at birth | | | | | | | | | | |
| < 25 | 10.5 | 0.5 | 0.0 | 1.7 | 12.8 | 40.4 | 12.5 | 25.6 | 12.4 | 149 |
| 25-34 | 10.4 | 1.0 | 0.0 | 0.0 | 2.8 | 44.5 | 19.1 | 25.2 | 6.9 | 117 |
| 35-49 | 14.0 | 1.5 | 0.0 | 3.9 | 12.4 | 35.2 | 19.3 | 27.1 | 1.5 | 76 |
| Education level | | | | | | | | | | |
| No education | 9.9 | 1.9 | 0.0 | 1.5 | 8.9 | 36.8 | 16.3 | 30.3 | 9.0 | 113 |
| Some primary | 7.2 | 1.1 | 0.0 | 3.4 | 10.9 | 47.1 | 19.1 | 24.3 | 6.3 | 82 |
| Completed primary | 14.6 | 0.0 | 0.0 | 0.6 | 8.5 | 40.4 | 14.1 | 22.9 | 9.2 | 139 |
| Attended secondary or higher | a | a | a | a | a | a | a | a | a | 8 |
| Wealth tercile | | | | | | | | | | |
| Low | 11.3 | 0.6 | 0.0 | 0.7 | 11.1 | 47.2 | 15.6 | 23.7 | 4.6 | 150 |
| Middle | 10.6 | 0.8 | 0.0 | 0.7 | 8.7 | 40.0 | 12.3 | 31.8 | 9.9 | 119 |
| High | 11.9 | 1.6 | 0.0 | 4.8 | 7.2 | 28.8 | 23.2 | 19.6 | 13.4 | 73 |
| Total | 11.2 | 0.9 | 0.0 | 1.6 | 9.4 | 40.7 | 16.0 | 25.8 | 8.4 | 342 |

Source: 2014 Kigoma Reproductive Health Survey.

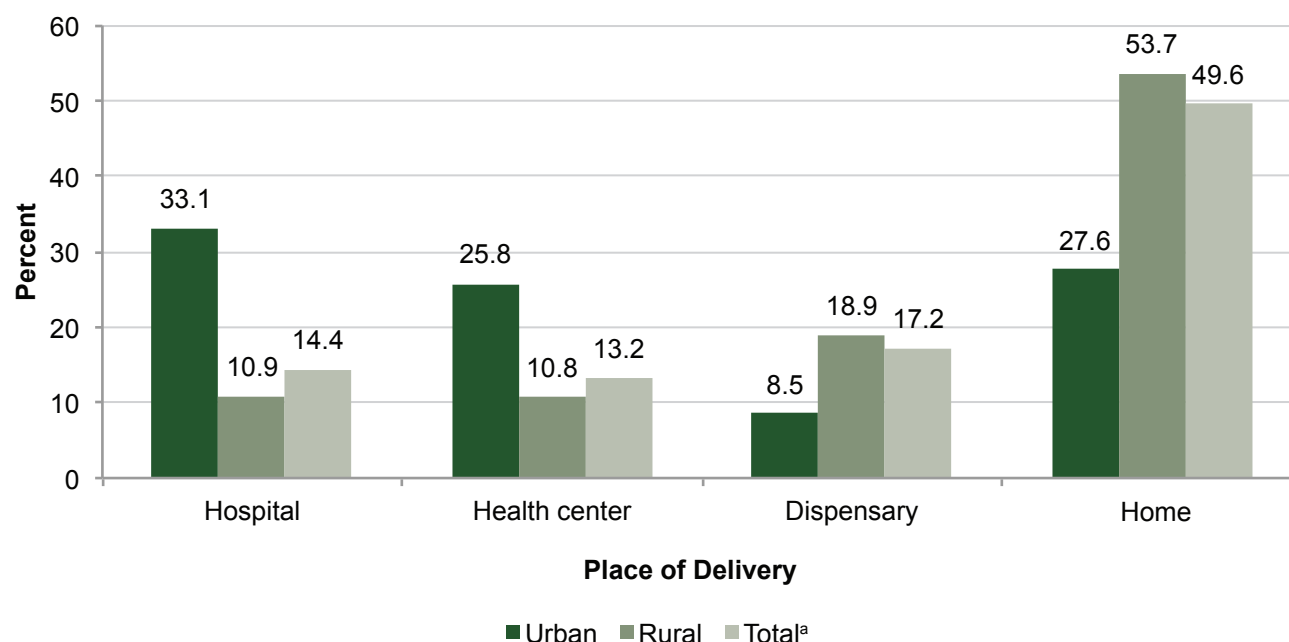
a Fewer than 25 women responded.

5.3 Delivery

Place of Delivery

The WHO recommends that all obstetric deliveries be conducted by skilled birth attendants.³ In Tanzania, skilled birth attendants are usually found in hospitals, health centers, and dispensaries. However, the RHS found that since 2009, about half of deliveries occurred at home (49.6%) (Figure 5.4). This was most common among women aged 35-49 years (53.5%), women with no education (61.9%), and women in the lowest wealth tercile (61.4%) (Table 5.7). Relatively few deliveries in Kigoma Region occurred in hospitals (14.4%), health centers (13.2%), or dispensaries (17.2%). Only 2.2% of women delivered outside of Kigoma Region. Women in urban settings reported a higher frequency of delivery at hospitals or health centers than at dispensaries or home. Women younger than age 25 years, those with some secondary education, and those in the highest wealth tercile were more likely to deliver in hospitals and health centers. Women in rural settings had the highest percentage of home deliveries (53.7%) and were more likely to deliver in a dispensary (18.9%) than at a hospital (10.9%) or health center (10.8%). Of women who lived more than 2 hours from the nearest health facility, 70.1% delivered at home.

Figure 5.4: Place of Delivery of Births Since January 2009 of Women Aged 15-49 Years, by Residence (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

^a 3.0% delivered en route to a facility; 0.4% had missing data for delivery location.

Table 5.7: Place of Delivery, by Selected Characteristics (Percent Distribution)

Births Since January 2009, of Women Aged 15-49 Years

| | Place of Delivery (%) | | | | | | | Total | Number of Births |
|--|-----------------------|-----------------------|---------------------|---------------------------|----------------------|----------------|----------------|-------|------------------|
| | Kigoma Hospitals | Kigoma Health Centers | Kigoma Dispensaries | Facilities Outside Kigoma | En Route to Facility | Own/Other Home | Other/ Missing | | |
| Residence | | | | | | | | | |
| Urban | 33.1 | 25.8 | 8.5 | 3.5 | 1.5 | 27.6 | 0.0 | 100.0 | 671 |
| Rural | 10.9 | 10.8 | 18.9 | 2.0 | 3.2 | 53.7 | 0.5 | 100.0 | 3,450 |
| One-way travel time to nearest health facility | | | | | | | | | |
| Less than 30 min | 20.2 | 17.5 | 24.4 | 2.6 | 1.6 | 32.9 | 0.8 | 100.0 | 825 |
| 30 min to 1 hour | 15.8 | 16.0 | 18.9 | 1.9 | 3.1 | 43.9 | 0.4 | 100.0 | 1,397 |
| 1 to 2 hours | 14.1 | 11.6 | 15.6 | 1.2 | 4.3 | 52.8 | 0.3 | 100.0 | 1,141 |
| 2+ hours | 6.8 | 6.8 | 10.1 | 3.9 | 2.1 | 70.1 | 0.3 | 100.0 | 758 |
| Age group (yr) at birth | | | | | | | | | |
| < 25 | 16.1 | 14.4 | 17.8 | 3.1 | 2.5 | 45.8 | 0.3 | 100.0 | 1,597 |
| 25-34 | 13.0 | 12.6 | 17.5 | 1.8 | 3.1 | 51.7 | 0.3 | 100.0 | 1,706 |
| 35-49 | 13.5 | 11.8 | 15.4 | 1.1 | 3.8 | 53.5 | 0.9 | 100.0 | 818 |
| Education level | | | | | | | | | |
| No education | 8.6 | 10.3 | 14.9 | 1.7 | 2.4 | 61.9 | 0.2 | 100.0 | 1,316 |
| Some primary | 13.0 | 13.7 | 13.3 | 2.4 | 1.8 | 55.0 | 0.8 | 100.0 | 617 |
| Completed primary | 16.4 | 14.2 | 20.4 | 2.0 | 4.0 | 42.5 | 0.5 | 100.0 | 1,999 |
| Attended secondary or higher | 39.6 | 21.7 | 14.7 | 7.4 | 0.5 | 16.0 | 0.0 | 100.0 | 189 |
| Wealth tercile | | | | | | | | | |
| Low | 8.0 | 8.8 | 16.0 | 2.0 | 3.3 | 61.4 | 0.6 | 100.0 | 1,486 |
| Middle | 12.6 | 11.4 | 20.3 | 1.7 | 3.2 | 50.4 | 0.3 | 100.0 | 1,472 |
| High | 25.0 | 21.1 | 14.9 | 3.2 | 2.2 | 33.2 | 0.3 | 100.0 | 1,163 |
| Year pregnancy ended | | | | | | | | | |
| 2009 | 16.3 | 10.6 | 16.9 | 2.5 | 2.0 | 51.6 | 0.2 | 100.0 | 695 |
| 2010 | 11.8 | 12.4 | 18.1 | 2.2 | 3.2 | 51.8 | 0.6 | 100.0 | 708 |
| 2011 | 13.7 | 13.6 | 15.9 | 1.8 | 2.2 | 52.1 | 0.8 | 100.0 | 697 |
| 2012 | 13.2 | 15.3 | 17.6 | 2.0 | 3.9 | 47.9 | 0.2 | 100.0 | 726 |
| 2013 | 14.6 | 13.7 | 18.2 | 3.2 | 3.2 | 46.6 | 0.6 | 100.0 | 746 |
| 2014 | 17.4 | 13.4 | 16.7 | 1.5 | 3.4 | 47.5 | 0.1 | 100.0 | 549 |
| Total | 14.4 | 13.2 | 17.2 | 2.2 | 3.0 | 49.6 | 0.4 | 100.0 | 4,121 |

Source: 2014 Kigoma Reproductive Health Survey.

Table 5.8 shows the one-way travel time to the nearest health facility by place of delivery for births since 2009. As expected, about 90% of women delivering in Kigoma facilities lived within 2 hours of a health facility. For those delivering at home, 27.9% lived more than 2 hours from a facility, but 41.5% lived within 1 hour.

Table 5.8: One-Way Travel Time to Nearest Health Facility, by Place of Delivery (Percent Distribution)
Births Since January 2009, of Women Aged 15-49 Years

| | Less than 30 Min | 30 Min - 1 Hr | 1-2 Hrs | 2+ Hrs | Total | Number of Births |
|--------------------------|---------------------|---------------|-------------|-------------|--------------|---------------------|
| Place of delivery | | | | | | |
| Kigoma hospital | 26.6 | 35.8 | 28.2 | 9.4 | 100.0 | 594 |
| Kigoma health center | 25.2 | 39.5 | 25.2 | 10.2 | 100.0 | 570 |
| Kigoma dispensary | 26.8 | 35.7 | 26.0 | 11.5 | 100.0 | 724 |
| Facility outside Kigoma | 22.3 | 27.8 | 15.7 | 34.2 | 100.0 | 94 |
| En route to a facility | 10.1 | 34.2 | 41.5 | 14.3 | 100.0 | 119 |
| Own/other home | 12.6 | 28.9 | 30.6 | 27.9 | 100.0 | 2,002 |
| Other/missing | a | a | a | a | a | 18 |
| Total | 18.9 | 32.6 | 28.7 | 19.8 | 100.0 | 4,121 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Fewer than 25 women responded.

Facility Referrals

An estimated 15% of pregnancies and childbirths need emergency obstetric care because of complications that are difficult to predict.⁴ Since many of these pregnancies require referral to higher level facilities for treatment, referrals are a critical component of emergency obstetric care. Overall, in Kigoma, 12.0% of all institutional births since January 2009 involved referrals to higher levels of care. Referrals were more common among women in rural settings (12.9%), women aged 35-49 years (15.3%), and women in the lowest wealth tercile (13.6%) (Table 5.9). A greater percentage of births to women with no education (13.2%) or some primary education (15.0%) were referred, compared with births to women who had completed primary school or higher (10.8%).

Table 5.9: Births Involving a Referral to a Facility, by Selected Characteristics (Percent)

All Institutional Births (Including in Transit) Since January 2009, of Women Aged 15-49 Years^a

| | Referral % | Number of Births |
|--------------------------------|---------------|---------------------|
| Residence | | |
| Urban | 8.9 | 471 |
| Rural | 12.9 | 1,630 |
| Age group (yr) at birth | | |
| < 25 | 11.7 | 883 |
| 25-34 | 11.0 | 834 |
| 35-49 | 15.3 | 384 |
| Education level | | |
| No education | 13.2 | 507 |
| Some primary | 15.0 | 278 |
| Completed primary | 10.8 | 1,153 |
| Attended secondary or higher | 10.8 | 163 |
| Wealth tercile | | |
| Low | 13.6 | 576 |
| Middle | 12.2 | 736 |
| High | 10.6 | 789 |
| Total | 12.0 | 2,101 |

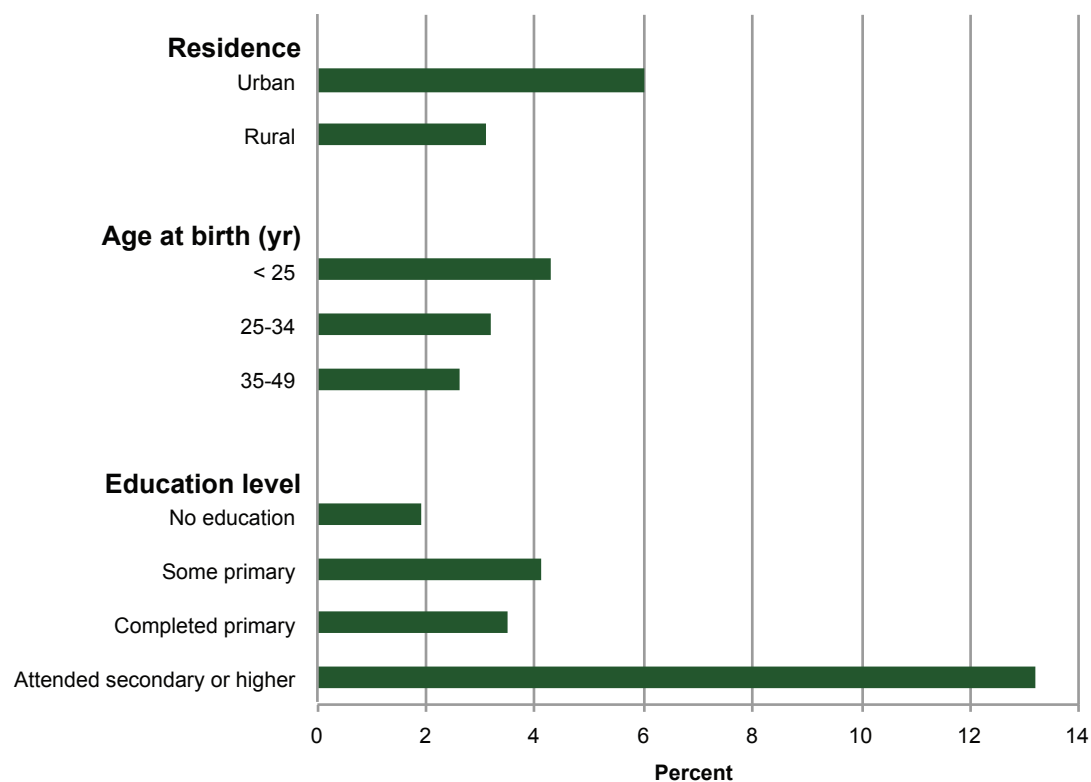
Source: 2014 Kigoma Reproductive Health Survey.

^a Information is missing for five women.

Cesarean Section Deliveries

The RHS found that 3.5% of all deliveries were by cesarean section (C-section), with higher C-section rates among women residing in urban settings (6.0%), those who attended secondary school or higher (13.2%), and those in the highest wealth tercile (5.2%). The frequency of C-sections decreased with maternal age (Figure 5.5, Table 5.10).

Figure 5.5: Births Since January 2009 Delivered by Cesarean Section, of Women Aged 15-49 Years, by Selected Characteristics (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 5.10: Births Delivered by Cesarean Section, by Selected Characteristics (Percent)

All Births Since January 2009, of Women Aged 15–49 Years

| | Cesarean Delivery (%) | Number of Births |
|--------------------------------|-----------------------|------------------|
| Residence | | |
| Urban | 6.0 | 671 |
| Rural | 3.1 | 3,450 |
| Age group (yr) at birth | | |
| < 25 | 4.3 | 1,597 |
| 25–34 | 3.2 | 1,706 |
| 35–49 | 2.6 | 818 |
| Education level | | |
| No education | 1.9 | 1,316 |
| Some primary | 4.1 | 617 |
| Completed primary | 3.5 | 1,999 |
| Attended secondary or higher | 13.2 | 189 |
| Wealth tercile | | |
| Low | 3.0 | 1,486 |
| Middle | 2.8 | 1,472 |
| High | 5.2 | 1,163 |
| Year pregnancy ended | | |
| 2009 | 3.2 | 695 |
| 2010 | 3.4 | 708 |
| 2011 | 3.8 | 697 |
| 2012 | 3.4 | 726 |
| 2013 | 3.7 | 746 |
| 2014 | 3.6 | 549 |
| Total | 3.5 | 4,121 |
| Tanzania | 4.5 | 8,176 |

Sources: 2014 Kigoma Reproductive Health Survey, 2010 Tanzania Demographic and Health Survey.

Mode and Cost of Travel to Facilities for Delivery

Distances from health care can be long in Kigoma Region, posing a significant challenge to women seeking obstetric care. Looking exclusively at women who delivered in health facilities since January 2009, the RHS found that the majority of women (80.1%) indicated a travel time of less than 2 hours to the health facility where they delivered (Table 5.11, Figure 5.6). In rural areas, however, fewer women were able to travel to a facility for delivery in less than 2 hours (78.4%) than were women in urban settings (85.3%). As education levels and wealth terciles increased, the percentage of women who traveled more than 2 hours decreased. In addition, the percentage of women who traveled 2 hours or more was greater among those referred to higher level facilities (39.2%) than among those not referred (17.3%).

Table 5.11: One-Way Travel Time to Delivery Facility, by Selected Characteristics (Percent Distribution)

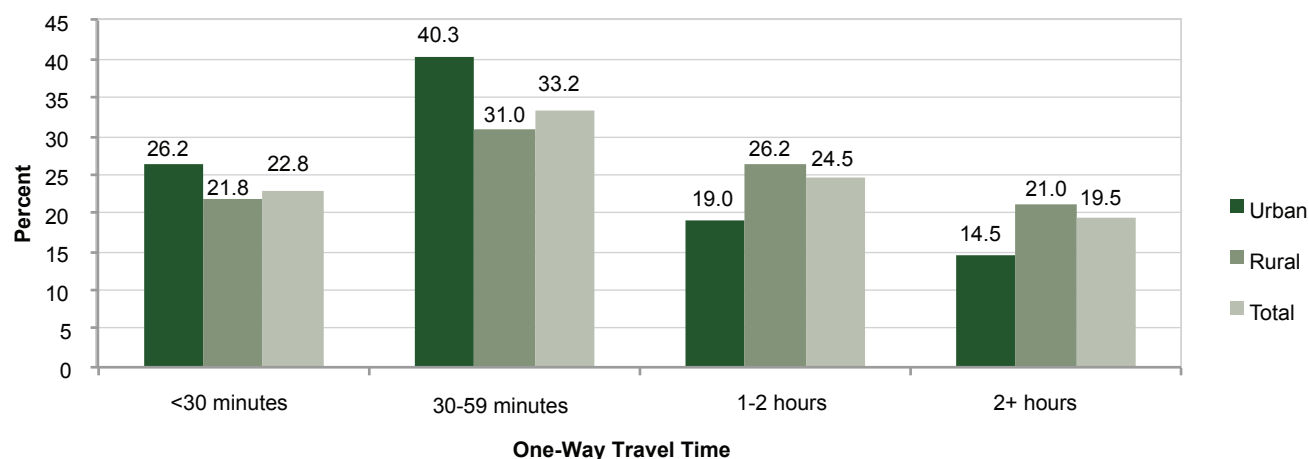
All Institutional Births Since January 2009, of Women Aged 15-49 Years^a

| | One-Way Travel Time to Delivery Facility (%) | | | | | Number of Births |
|------------------------------|--|-----------------|-----------|----------|-------|------------------|
| | Less Than 30 Minutes | 30 Min - 1 Hour | 1-2 Hours | 2+ Hours | Total | |
| Residence | | | | | | |
| Urban | 25.2 | 40.8 | 19.3 | 14.7 | 100.0 | 455 |
| Rural | 19.6 | 31.9 | 26.9 | 21.6 | 100.0 | 1,480 |
| Age group (yr) at birth | | | | | | |
| < 25 | 18.2 | 33.4 | 26.2 | 22.2 | 100.0 | 823 |
| 25-34 | 22.9 | 36.4 | 23.8 | 16.9 | 100.0 | 771 |
| 35-49 | 23.9 | 30.1 | 25.1 | 20.9 | 100.0 | 341 |
| Education level | | | | | | |
| No education | 14.9 | 34.9 | 25.9 | 24.3 | 100.0 | 458 |
| Some primary | 18.4 | 31.2 | 25.5 | 24.9 | 100.0 | 256 |
| Completed primary | 22.1 | 33.6 | 26.5 | 17.9 | 100.0 | 1,059 |
| Attended secondary or higher | 35.7 | 39.5 | 12.6 | 12.1 | 100.0 | 162 |
| Wealth tercile | | | | | | |
| Low | 15.5 | 34.0 | 26.7 | 23.8 | 100.0 | 514 |
| Middle | 15.5 | 30.1 | 31.2 | 23.2 | 100.0 | 672 |
| High | 29.6 | 37.6 | 18.4 | 14.3 | 100.0 | 749 |
| Cesarean section delivery | | | | | | |
| No | 21.5 | 34.5 | 25.4 | 18.6 | 100.0 | 1,798 |
| Yes | 13.4 | 28.6 | 20.8 | 37.2 | 100.0 | 137 |
| Referral | | | | | | |
| No | 22.5 | 35.3 | 24.9 | 17.3 | 100.0 | 1,704 |
| Yes | 9.9 | 24.7 | 26.2 | 39.2 | 100.0 | 231 |
| Birth order | | | | | | |
| 1 | 20.0 | 29.9 | 24.9 | 25.1 | 100.0 | 479 |
| 2 | 20.3 | 38.9 | 22.0 | 18.9 | 100.0 | 309 |
| 3 | 23.4 | 36.3 | 26.6 | 13.7 | 100.0 | 283 |
| 4+ | 20.9 | 33.8 | 25.8 | 19.4 | 100.0 | 864 |
| Total | 21.0 | 34.0 | 25.1 | 19.9 | 100.0 | 1,935 |

Source: 2014 Kigoma Reproductive Health Survey.

^aForty-seven women did not remember travel time.

Figure 5.6: One-Way Travel Time to Delivery Facility for Births Since January 2009 of Women Aged 15-49 Years, by Residence (Percent Distribution)^a

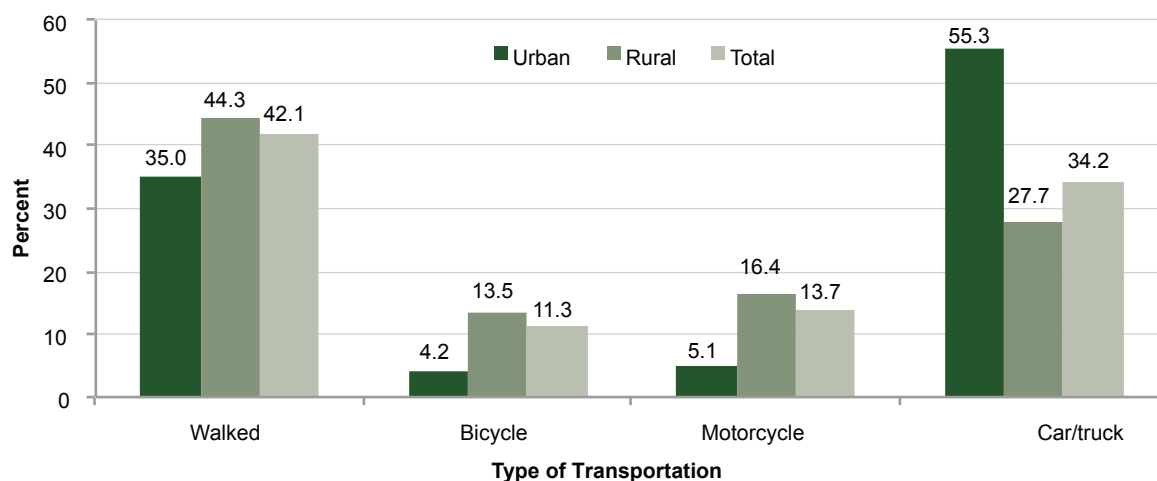


Source: 2014 Kigoma Reproductive Health Survey.

^aAmong women who remembered travel time.

Women were asked how they traveled to facilities for their delivery. Overall, 42.1% of women reported walking, and 34.2% traveled by car or truck (Figure 5.7, Table 5.12). More than half of women who resided in urban settings used cars or trucks for transport to a facility for delivery (55.3%). As education level and wealth increased, the use of cars or trucks increased.

Figure 5.7: Type of Transportation Used to Delivery Facility for Births Since January 2009 of Women Aged 15-49 Years, by Residence (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 5.12: Type of Transportation Used to Delivery Facility, by Selected Characteristics (Percent)

All Institutional Births Since January 2009, of Women Aged 15-49 Years

| | Walk | Bicycle | Motorcycle | Car/Truck | Boat | Other | Number of Births |
|--------------------------------|-------------|-------------|-------------|-------------|------------|------------|------------------|
| Residence | | | | | | | |
| Urban | 35.0 | 4.2 | 5.1 | 55.3 | 1.9 | 0.0 | 461 |
| Rural | 44.3 | 13.5 | 16.4 | 27.7 | 0.5 | 0.6 | 1,521 |
| Age group (yr) at birth | | | | | | | |
| < 25 | 38.5 | 11.7 | 15.6 | 35.0 | 1.1 | 0.7 | 844 |
| 25-34 | 45.0 | 11.9 | 11.6 | 32.7 | 0.7 | 0.3 | 785 |
| 35-49 | 45.3 | 8.2 | 13.5 | 35.8 | 0.0 | 0.2 | 353 |
| Education level | | | | | | | |
| No education | 41.5 | 16.8 | 13.1 | 28.7 | 1.5 | 0.1 | 475 |
| Some primary | 43.1 | 11.7 | 15.5 | 30.2 | 1.3 | 0.4 | 265 |
| Completed primary | 44.2 | 9.8 | 14.5 | 33.3 | 0.5 | 0.6 | 1,080 |
| Attended secondary or higher | 27.8 | 3.2 | 6.8 | 64.2 | 0.0 | 0.8 | 162 |
| Wealth tercile | | | | | | | |
| Low | 44.9 | 16.6 | 16.9 | 23.5 | 1.6 | 0.6 | 530 |
| Middle | 48.5 | 12.0 | 15.6 | 25.3 | 0.5 | 0.3 | 691 |
| High | 34.3 | 6.9 | 9.7 | 49.9 | 0.5 | 0.4 | 761 |
| Total | 42.1 | 11.3 | 13.7 | 34.2 | 0.8 | 0.4 | 1,982 |

Source: 2014 Kigoma Reproductive Health Survey.

There are often costs associated with childbirth. Almost half of all women who delivered in a facility (44.7%) reported paying for transportation to their delivery facility (Table 5.13). More women in urban settings (54.4%), in the highest wealth tercile (51.1%), and among those who delivered in Kigoma Hospital (72.2%) reported paying for transport. Some women also reported payment for facility-related expenses, including delivery care, supplies, medications, and food (14.8%, 8.1%, 4.7%, and 3.6%, respectively). Supplies for delivery were the most common expense, with more than half of women (59.2%) reporting paying for supplies brought from home, and 8.1% paying for them at the facility. Some women also paid for accommodations near the facility (4.6%) and for dependent care (7.0%). A small percentage of women (5.9%) reported paying informal fees (bribes) for their delivery-related care. This was highest among women in the lowest wealth tercile (7.8%) and those delivering outside of Kigoma Region (14.7%).

Table 5.13: Types of Expenditures Incurred (in TZS)^a During Labor and Childbirth, by Selected Characteristics (Percent)

Most Recent Institutional Births Since January 2009, of Women Aged 15–49 Years^b

| | | Delivery | | Informal Fees (Bribes) | | Supplies (Brought from Home) | | Medications | | Accommodation | | Food at the Facility | | Dependent Care | | Any Other Expense | | Number of Births | |
|-------------------------|--|-----------|------|------------------------|------|------------------------------|-----|-------------|------|---------------|-----|----------------------|------|----------------|-----|-------------------|--|------------------|--|
| Residence | | Transport | Care | | | | | | | | | | | | | | | | |
| Urban | | 54.4 | 9.7 | 5.8 | 5.9 | 67.8 | 6.2 | 4.9 | 4.9 | 2.8 | 2.8 | 12.2 | 5.3 | 7.2 | 301 | | | | |
| Rural | | 41.4 | 16.5 | 5.9 | 8.8 | 56.2 | 4.2 | 4.6 | 4.6 | 3.8 | 3.8 | 5.3 | 7.6 | 924 | | | | | |
| Wealth tercile | | | | | | | | | | | | | | | | | | | |
| Low | | 41.5 | 14.1 | 7.8 | 9.4 | 56.3 | 5.7 | 3.6 | 3.6 | 5.6 | 5.6 | 6.4 | 8.3 | 306 | | | | | |
| Middle | | 38.6 | 16.1 | 5.6 | 9.0 | 57.5 | 3.9 | 5.8 | 5.8 | 2.7 | 2.7 | 4.5 | 7.8 | 395 | | | | | |
| High | | 51.1 | 14.2 | 5.0 | 6.6 | 62.1 | 4.8 | 4.4 | 4.4 | 3.0 | 3.0 | 9.3 | 6.9 | 524 | | | | | |
| Place of delivery | | | | | | | | | | | | | | | | | | | |
| Kigoma hospital | | 72.2 | 7.9 | 6.3 | 7.0 | 61.3 | 4.6 | 11.0 | 11.0 | 4.4 | 4.4 | 9.0 | 12.0 | 402 | | | | | |
| Kigoma health center | | 43.6 | 18.0 | 3.2 | 10.6 | 57.4 | 5.4 | 2.1 | 2.1 | 2.9 | 2.9 | 7.7 | 6.4 | 355 | | | | | |
| Kigoma dispensary | | 17.4 | 17.8 | 6.5 | 6.7 | 59.6 | 3.9 | 1.0 | 1.0 | 3.5 | 3.5 | 5.1 | 5.1 | 413 | | | | | |
| Facility outside Kigoma | | 57.5 | 22.3 | 14.7 | 9.5 | 50.1 | 7.9 | 1.9 | 1.9 | 1.6 | 1.6 | 3.1 | 0.0 | 55 | | | | | |
| Total | | 44.7 | 14.8 | 5.9 | 8.1 | 59.2 | 4.7 | 4.6 | 4.6 | 3.6 | 3.6 | 7.0 | 7.5 | 1,225 | | | | | |

Abbreviation: TZS, Tanzanian shillings.

Source: 2014 Kigoma Reproductive Health Survey.

^a Exchange rate as of September 2014: 1 USD = 1600 TZS.

^b Between 7–29 unknown responses for each expenditure. A total of four cases of in-kind payment were removed from analysis.

Overall expenditures related to the last delivery were an average of Tanzanian shillings (TZS) 12,768 (\$7.98 USD, as of September 2014) (Table 5.14). In comparison with any facility in Kigoma, expenditures associated with delivery outside of Kigoma Region were higher (average TZS 20,824). Average expenditures within Kigoma Region increased according to level of facility; average expenditures were lowest at dispensaries and highest at hospitals. Only 13.2% of deliveries in health facilities did not incur any expenditure. The greatest expenditures were for supplies brought from home (average TZS 3,770), transport (average TZS 3,681), and delivery care (average TZS 2,648) (Table 5.15.)

Table 5.14: Expenditures Incurred (In TZS)^a During Labor and Childbirth (Percent Distribution) and Total Expenditures Related to Last Institutional Delivery (Mean)

Most Recent Institutional Births Since January 2009, of Women Aged 15-49 Years^b

| Expenditure Category (%) | | | | | | | Mean Total Expenditures Related to Last Institutional Delivery Since January 2009 (Average in TZS) | Number of Births |
|--------------------------|------|----------------|------------------------|--------------------------|----------------|-------|--|---------------------|
| | None | 1-4,999 TZS | 5,000- 9,999 TZS | 10,000- 19,999 TZS | 20,000+ TZS | Total | | |
| Residence | | | | | | | | |
| Urban | 8.7 | 13.0 | 29.3 | 28.2 | 20.8 | 100.0 | 12,562 | 301 |
| Rural | 14.7 | 14.9 | 29.5 | 23.6 | 17.3 | 100.0 | 12,838 | 924 |
| Wealth tercile | | | | | | | | |
| Low | 12.5 | 14.3 | 30.1 | 28.9 | 14.2 | 100.0 | 12,138 | 306 |
| Middle | 15.1 | 14.9 | 30.3 | 20.1 | 19.7 | 100.0 | 12,627 | 395 |
| High | 12.1 | 14.2 | 28.4 | 26.0 | 19.3 | 100.0 | 13,244 | 524 |
| Place of delivery | | | | | | | | |
| Kigoma hospital | 5.7 | 14.1 | 29.5 | 28.8 | 21.8 | 100.0 | 14,805 | 402 |
| Kigoma health center | 16.4 | 10.9 | 26.9 | 24.6 | 21.2 | 100.0 | 13,882 | 355 |
| Kigoma dispensary | 18.0 | 17.9 | 32.5 | 21.0 | 10.7 | 100.0 | 8,763 | 413 |
| Facility outside Kigoma | 11.7 | 12.9 | 21.8 | 24.9 | 28.7 | 100.0 | 20,824 | 55 |
| Total | 13.2 | 14.4 | 29.4 | 24.8 | 18.2 | 100.0 | 12,768 | 1,225 |

Abbreviation: TZS, Tanzanian shillings.

Source: 2014 Kigoma Reproductive Health Survey.

^a Exchange rate as of September 2014: 1 USD = 1600 TZS.

^b Between 7-29 unknown responses for each expenditure. Total of four cases of in-kind payment removed from analysis. For unknown/in-kind expenditures, assumption of zero expenditures in that category.

Table 5.15: Expenditures Incurred (Mean, in TZS)^a by Type of Expenditure During Labor and Childbirth
Most Recent Institutional Births Since January 2009, of Women Aged 15-49 Years^b

| Expenditure Category | | | | | | | | | | Mean Total Expenditures Related to Last Institutional Delivery Since January 2009 (Average in TZS) | Number of Births |
|-------------------------|--------------|---------------|---------------|------------------------|------------------------------|-------------|---------------|----------------------|----------------|--|------------------|
| Residence | Transport | Delivery Care | Informal Fees | Supplies (at Facility) | Supplies (Brought from Home) | Medications | Accommodation | Food at the Facility | Dependent Care | Any Other Expense | |
| Urban | 3,407 | 1,235 | 201 | 245 | 4,814 | 535 | 77 | 122 | 1,494 | 432 | 301 |
| Rural | 3,773 | 3,127 | 468 | 383 | 3,416 | 319 | 174 | 294 | 503 | 382 | 924 |
| Wealth tercile | | | | | | | | | | | |
| Low | 3,716 | 2,732 | 423 | 392 | 3,301 | 387 | 109 | 284 | 456 | 337 | 306 |
| Middle | 3,574 | 2,937 | 462 | 406 | 3,422 | 240 | 137 | 252 | 518 | 678 | 395 |
| High | 3,741 | 2,379 | 340 | 278 | 4,309 | 467 | 182 | 228 | 1,107 | 214 | 524 |
| Place of delivery | | | | | | | | | | | |
| Kigoma hospital | 5,953 | 1,683 | 330 | 224 | 3,664 | 579 | 213 | 330 | 1,284 | 545 | 402 |
| Kigoma health center | 3,646 | 4,106 | 177 | 477 | 3,959 | 278 | 85 | 169 | 643 | 343 | 355 |
| Kigoma dispensary | 1,184 | 1,893 | 423 | 375 | 3,569 | 196 | 156 | 251 | 371 | 345 | 413 |
| Facility outside Kigoma | 5,896 | 6,264 | 2,130 | 250 | 4,874 | 795 | 38 | 159 | 417 | 0 | 55 |
| Total | 3,681 | 2,648 | 400 | 348 | 3,770 | 373 | 149 | 250 | 754 | 395 | 1,225 |

Abbreviation: TZS, Tanzanian shillings.

^aExchange rate as of September 2014: 1 USD = 1600 TZS.

^b Between 7-29 unknown responses for each expenditure. Total of four cases of in-kind payment removed from analysis. For unknown/in-kind expenditures, assumption of zero expenditures in that category.

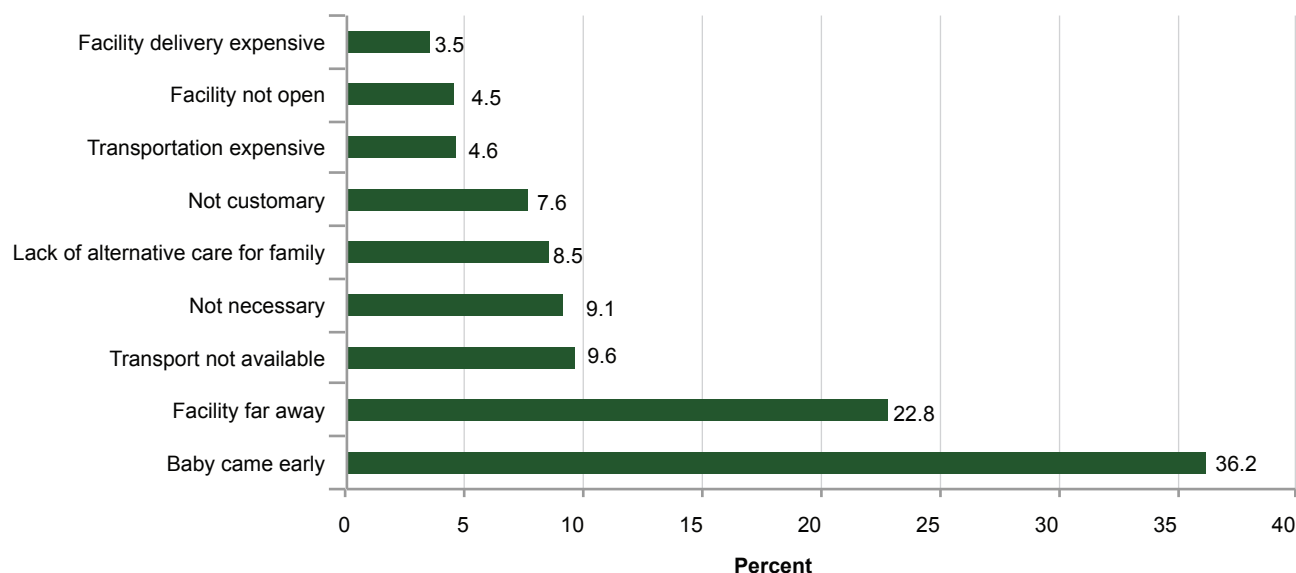
Reasons for Not Delivering in a Health Facility

Women who did not deliver in a health facility were asked the reason(s) they did not. The two most common reasons were the distance (22.8%) and that the baby came earlier than expected (36.2%) (Figure 5.8, Table 5.16). Not surprisingly, women living 2 or more hours from the nearest health facility identified distance as a reason nearly half the time (48.9%). Distance was also most commonly identified as a major reason by women younger than age 25 years, those in the lowest wealth tercile, or those with either no education or some secondary education.

The "baby came earlier than expected" was reported most frequently by women who were aged 35-49 years. Surprisingly, 10.1% of urban women reported that they did not deliver in a facility because transport was unavailable, and 6.3% of urban women said they did not deliver in a facility because it was not open.

Overall, costs related to the impact on the family were also a consideration. For instance, 8.5% reported that not being able to find alternative care for their family was a reason for not delivering in a health facility. Other barriers included belief that facility delivery was unnecessary (9.1%) or not customary (7.6%), the husband's not allowing it (2.2%), fear of abuse or disrespect at the facility (2.1%), and lack of a female care provider (1.6%).

Figure 5.8: Reasons Mentioned for Not Delivering in a Health Facility^a for Births Since January 2009, of Women Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

^a Births in transit not included. Only responses $\geq 3.5\%$ shown here.

Table 5.16: Reasons Mentioned for Not Delivering in a Health Facility, by Selected Characteristics (Percent)

All Noninstitutional Births (Excluding in Transit) Since January 2009, of Women Aged 15-49 Years

| Reasons for Not Delivering in a Facility (%) | | | | | | | | | | | | | | | | | |
|--|------|-------------------|----------|-----------------------|---------------------|-----------------------|----------------------------------|---------------------------------------|-------------------------------------|--------------------------------------|--------------------------------|---------------------------------|------------------------------|-------------|---------------|-------|------------------|
| Characteristic | Cost | Facility Not Open | Distance | Transport Unavailable | Transport Expensive | Do Not Trust Facility | Expect Poor Quality Service/Care | Fear of Abuse/ Disrespect at Facility | Lack of Alternative Care for Family | Lack of Accommodations Near Facility | No Female Provider at Facility | Baby Came Earlier Than Expected | Husband/Family Did Not Allow | Unnecessary | Not Customary | Other | Number of Births |
| Residence | | | | | | | | | | | | | | | | | |
| Urban | 3.4 | 6.3 | 25.0 | 10.1 | 4.6 | 0.5 | 1.2 | 0.6 | 8.2 | 0.0 | 4.1 | 36.1 | 1.5 | 8.8 | 3.9 | 5.1 | 200 |
| Rural | 3.6 | 4.3 | 22.5 | 9.6 | 4.6 | 1.2 | 1.0 | 2.2 | 8.5 | 0.7 | 1.4 | 36.2 | 2.2 | 9.1 | 8.0 | 5.2 | 1,813 |
| One-way travel time to nearest health facility | | | | | | | | | | | | | | | | | |
| Less than 30 min | 5.1 | 5.8 | 6.5 | 4.4 | 3.2 | 0.6 | 0.2 | 4.9 | 6.1 | 0.9 | 2.7 | 44.9 | 1.3 | 13.6 | 6.6 | 7.1 | 277 |
| 30 min - 1 hr | 3.0 | 7.3 | 7.6 | 5.1 | 2.8 | 1.1 | 2.0 | 1.0 | 7.3 | 0.0 | 1.8 | 41.4 | 3.3 | 10.5 | 9.2 | 9.4 | 616 |
| 1-2 hrs | 3.6 | 3.3 | 19.9 | 7.2 | 1.4 | 1.2 | 1.3 | 2.7 | 11.3 | 1.0 | 1.7 | 38.7 | 1.7 | 8.6 | 10.3 | 3.7 | 603 |
| 2+ hrs | 3.3 | 2.3 | 48.9 | 19.2 | 10.5 | 1.4 | 0.1 | 1.3 | 7.6 | 0.9 | 0.9 | 24.3 | 1.9 | 6.1 | 3.6 | 1.7 | 517 |
| Age group (yr) at birth | | | | | | | | | | | | | | | | | |
| < 25 | 5.0 | 4.9 | 26.9 | 11.5 | 4.4 | 0.8 | 0.8 | 1.6 | 9.1 | 0.9 | 1.6 | 35.9 | 2.5 | 7.7 | 4.2 | 5.2 | 711 |
| 25-34 | 2.1 | 4.4 | 20.5 | 9.6 | 4.9 | 1.7 | 1.4 | 2.6 | 8.6 | 0.5 | 2.1 | 34.7 | 2.0 | 10.4 | 8.7 | 5.4 | 870 |
| 35-49 | 3.9 | 3.8 | 19.5 | 5.7 | 4.1 | 0.5 | 0.9 | 2.0 | 6.9 | 0.4 | 0.7 | 40.5 | 1.8 | 9.0 | 12.0 | 4.8 | 432 |
| Education level | | | | | | | | | | | | | | | | | |
| No education | 4.1 | 4.0 | 27.2 | 12.1 | 6.4 | 0.8 | 0.8 | 2.3 | 9.3 | 0.5 | 0.9 | 30.9 | 2.2 | 8.9 | 7.2 | 5.1 | 808 |
| Some primary | 4.2 | 6.6 | 22.0 | 8.5 | 4.1 | 0.5 | 2.0 | 2.7 | 7.0 | 0.9 | 0.9 | 36.3 | 2.1 | 11.3 | 7.3 | 3.6 | 338 |
| Primary complete | 2.7 | 4.1 | 18.4 | 7.7 | 3.1 | 1.8 | 1.0 | 1.7 | 8.1 | 0.8 | 2.7 | 41.6 | 2.3 | 8.3 | 8.3 | 5.9 | 841 |
| Attended secondary or higher | 5.6 | 3.1 | 29.8 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.1 | 0.0 | 0.0 | 34.3 | 0.0 | 11.9 | 4.1 | 7.1 | 26 |
| Wealth tercile | | | | | | | | | | | | | | | | | |
| Low | 4.0 | 4.0 | 28.3 | 11.5 | 4.6 | 0.6 | 0.8 | 1.3 | 9.2 | 0.6 | 0.8 | 33.2 | 2.2 | 9.2 | 8.4 | 5.0 | 907 |
| Middle | 4.1 | 4.6 | 19.0 | 8.2 | 5.0 | 1.9 | 1.3 | 2.0 | 8.7 | 0.9 | 2.3 | 39.7 | 2.6 | 8.2 | 7.6 | 5.4 | 735 |
| High | 1.3 | 5.4 | 16.7 | 7.9 | 3.6 | 1.0 | 1.3 | 4.4 | 6.3 | 0.4 | 2.3 | 36.9 | 1.2 | 10.5 | 5.7 | 5.5 | 371 |
| Total | 3.5 | 4.5 | 22.8 | 9.6 | 4.6 | 1.1 | 1.1 | 2.1 | 8.5 | 0.7 | 1.6 | 36.2 | 2.2 | 9.1 | 7.6 | 5.2 | 2,013 |

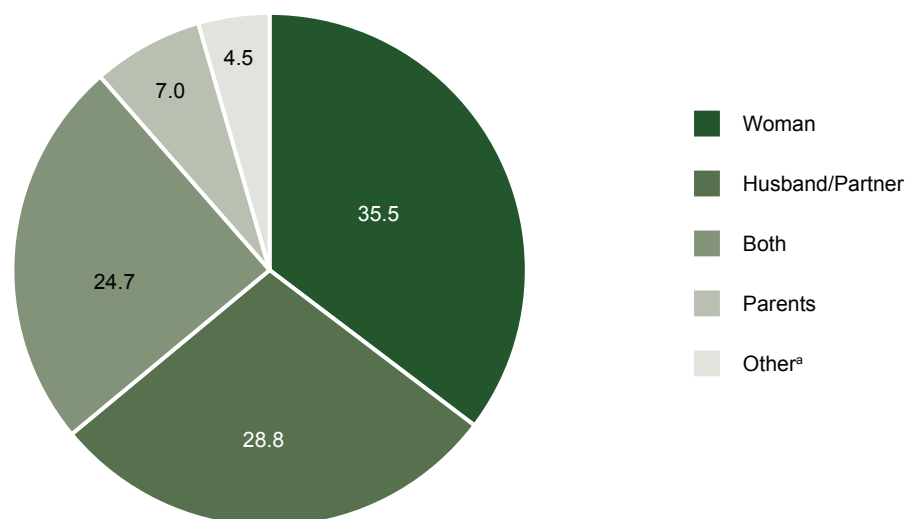
Source: 2014 Kwaoma Reproductive Health Survey.

Source: 2014 Kigoma Reproductive Health Survey.

Delivery Location Decision Making

Figure 5.9 shows the percent distribution of who decided where to deliver the most recent birth. For home deliveries, the woman was most often the decision maker (43.1%), though the husband/partner decided 25.8% of the time, and the couple decided together 22.0% of the time. For facility deliveries, the husband/partner was more likely to be the decision maker (32.3%), though the woman decided 28.3% of the time, and they decided together 26.2% of the time (Table 5.17).

Figure 5.9: Person Who Decides Where to Deliver the Baby, for Births Since January 2009 of Women Aged 15-49 Years (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

^a "Other" category includes specified family members or friends.

Table 5.17: Person Who Decided Where to Deliver the Baby, by Place of Delivery (Percent Distribution)

Most Recent Births Since January 2009, of Women Aged 15-49 Years

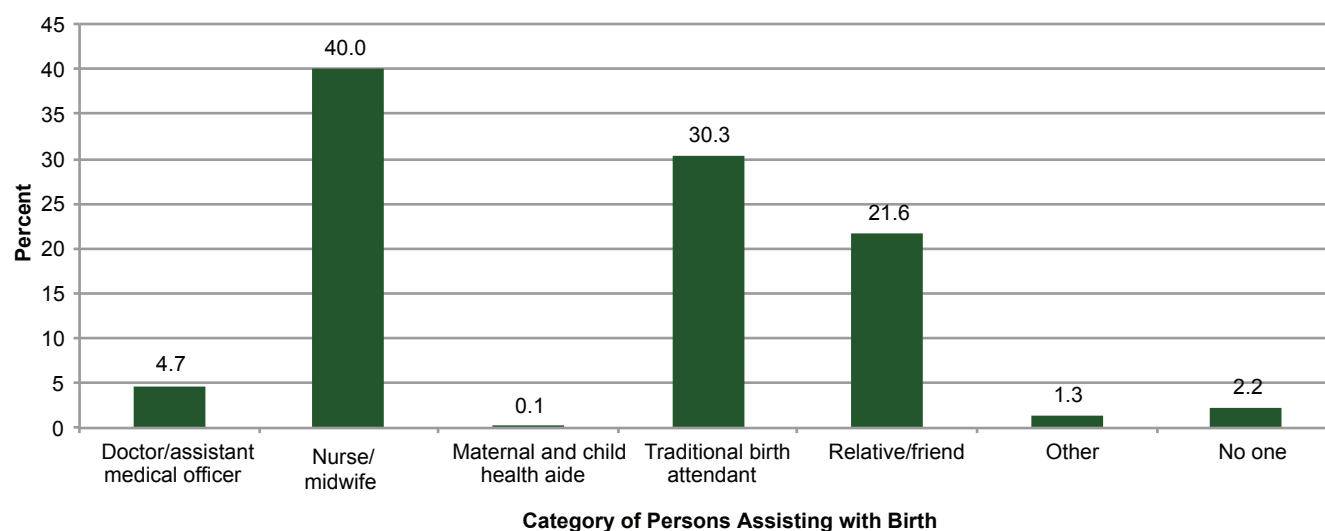
| Place Of Delivery | Person Who Decided Place of Delivery (%) | | | | | | Total | Number of Births |
|--------------------------|--|------------------|-------------------------------|---------------------------|-------------------------|------------|--------------|------------------|
| | Pregnant Woman Herself | Husband/ Partner | Both Woman & Husband/ Partner | Husband/ Partner's Parent | Pregnant Woman's Parent | Other | | |
| Health facility | 28.3 | 32.3 | 26.2 | 2.8 | 5.3 | 5.0 | 100.0 | 1,225 |
| Home | 43.1 | 25.8 | 22.0 | 2.3 | 3.7 | 3.0 | 100.0 | 1,094 |
| In transit/other/missing | 36.5 | 18.4 | 37.5 | 1.0 | 3.2 | 3.3 | 100.0 | 91 |
| Total | 35.5 | 28.8 | 24.7 | 2.5 | 4.5 | 4.0 | 100.0 | 2,410 |

Source: 2014 Kigoma Reproductive Health Survey.

Delivery Attendance

The most common birth attendants were nurse midwives, who assisted at 40.0% of all deliveries and at 82.0% of facility deliveries (Table 5.18). Overall, women reported deliveries by traditional birth attendants (30.3%) and relatives/friends (20.3%) for a combined total exceeding 50% (Figure 5.10). Traditional birth attendants and relatives/friends were more commonly reported in rural settings (33.0% and 23.7%, respectively), by women in the lowest wealth tercile (36.0% and 26.7%, respectively), and by those without education (34.5% and 26.0%, respectively). Traditional birth attendants were the most common category of persons assisting with home deliveries (56.4%).

Figure 5.10: Categories of Persons Assisting with Births Since January 2009, of Women Aged 15-49 Years (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 5.18: Category of Personnel Assisting with Births, by Selected Characteristics (Percent) Births Since January 2009, of Women Aged 15-49 Years

| Characteristic | Category of Personnel Assisting with Births (%) | | | | | | | | | | | | | | Number of Births |
|------------------------------|---|------------------|--------------|----------------|----------|-------------------|-----------------|-----------------------|------|------------------|-------|--------|---------------|---|------------------|
| | Doctor/ AMO | Clinical Officer | ACO | Nurse/ Midwife | MCH Aide | Medical Attendant | Nurse Assistant | Village Health Worker | TBA | Relative/ Friend | Other | No One | Does Not Know | Any Skilled Attendant at Birth ^a | |
| Residence | | | | | | | | | | | | | | | |
| Urban | 6.7 | 1.4 | 2.2 | 64.3 | 0.4 | 4.3 | 3.4 | 0.5 | 16.1 | 10.8 | 1.2 | 1.3 | 0.0 | 72.2 | 671 |
| Rural | 4.3 | 1.5 | 1.2 | 35.4 | 0.1 | 3.4 | 3.1 | 0.2 | 33.0 | 23.7 | 1.4 | 2.4 | 0.0 | 43.8 | 3,450 |
| Age group (yr) at birth | | | | | | | | | | | | | | | |
| < 25 | 5.3 | 1.9 | 1.0 | 42.4 | 0.2 | 3.9 | 3.6 | 0.2 | 28.1 | 21.1 | 0.8 | 0.8 | 0.0 | 52.2 | 1,597 |
| 25-34 | 4.5 | 0.9 | 1.7 | 39.0 | 0.2 | 3.5 | 2.7 | 0.4 | 31.5 | 22.4 | 1.4 | 2.5 | 0.0 | 46.1 | 1,706 |
| 35-49 | 3.6 | 1.8 | 1.2 | 36.4 | 0.0 | 2.8 | 3.1 | 0.2 | 32.8 | 20.9 | 2.6 | 4.9 | 0.0 | 43.8 | 818 |
| Education level | | | | | | | | | | | | | | | |
| No education | 2.6 | 1.0 | 1.0 | 29.9 | 0.2 | 2.9 | 2.4 | 0.1 | 34.5 | 26.0 | 1.8 | 3.3 | 0.0 | 36.7 | 1,316 |
| Some primary | 4.6 | 0.8 | 0.9 | 35.1 | 0.2 | 4.4 | 1.0 | 0.2 | 34.3 | 23.7 | 1.7 | 1.8 | 0.0 | 43.0 | 617 |
| Completed primary | 4.8 | 2.1 | 1.7 | 45.4 | 0.1 | 3.8 | 4.4 | 0.4 | 28.1 | 19.2 | 1.1 | 1.8 | 0.0 | 54.5 | 1,999 |
| Attended secondary or higher | 18.7 | 0.3 | 1.6 | 72.6 | 0.0 | 1.6 | 3.2 | 0.0 | 10.2 | 8.2 | 0.0 | 0.0 | 0.4 | 83.9 | 189 |
| Wealth tercile | | | | | | | | | | | | | | | |
| Low | 3.2 | 1.1 | 1.0 | 29.4 | 0.2 | 1.7 | 2.1 | 0.3 | 36.0 | 26.7 | 1.9 | 3.2 | 0.0 | 35.9 | 1,486 |
| Middle | 4.2 | 2.0 | 1.3 | 37.8 | 0.0 | 4.9 | 3.8 | 0.3 | 31.5 | 22.8 | 1.3 | 2.1 | 0.0 | 47.3 | 1,472 |
| High | 7.3 | 1.3 | 1.7 | 56.5 | 0.2 | 4.1 | 3.8 | 0.3 | 21.4 | 13.5 | 0.6 | 1.0 | 0.0 | 65.5 | 1,163 |
| Place of delivery | | | | | | | | | | | | | | | |
| Health facility | 10.0 | 3.1 | 2.8 | 82.0 | 0.3 | 7.0 | 6.2 | 0.2 | 2.3 | 1.3 | 0.1 | 0.0 | 0.0 | 98.5 | 1,982 |
| Home | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.2 | 0.3 | 0.3 | 56.4 | 39.0 | 2.5 | 4.3 | 0.0 | 2.9 | 2,002 |
| In transit/other/missing | 0.0 | 0.5 | 0.0 | 8.2 | 0.0 | 2.8 | 2.9 | 0.9 | 37.0 | 49.9 | 1.6 | 1.9 | 0.0 | 14.4 | 137 |
| Year pregnancy ended | | | | | | | | | | | | | | | |
| 2009 | 3.8 | 1.2 | 0.5 | 39.8 | 0.1 | 3.2 | 2.4 | 0.4 | 33.0 | 19.5 | 1.4 | 2.4 | 0.0 | 46.8 | 695 |
| 2010 | 4.7 | 0.9 | 1.4 | 39.2 | 0.2 | 3.6 | 2.7 | 0.3 | 28.8 | 25.0 | 0.9 | 2.0 | 0.0 | 46.6 | 708 |
| 2011 | 4.8 | 2.2 | 1.3 | 38.5 | 0.2 | 3.6 | 3.4 | 0.0 | 32.5 | 21.1 | 1.3 | 1.7 | 0.0 | 47.0 | 697 |
| 2012 | 4.5 | 1.2 | 2.0 | 40.8 | 0.2 | 3.7 | 3.4 | 0.2 | 28.7 | 21.3 | 1.7 | 3.0 | 0.1 | 49.5 | 726 |
| 2013 | 4.7 | 1.2 | 1.7 | 40.9 | 0 | 3.5 | 3.8 | 0.4 | 29.9 | 21.2 | 1.2 | 1.9 | 0 | 49.8 | 746 |
| 2014 | 5.8 | 2.3 | 0.9 | 40.8 | 0.2 | 3.6 | 3.3 | 0.3 | 29.1 | 21.8 | 1.7 | 2.3 | 0 | 49.9 | 549 |
| Total | 4.7 | 1.5 | 1.3 | 40.0 | 0.1 | 3.5 | 3.2 | 0.3 | 30.3 | 21.6 | 1.3 | 2.2 | 0.0 | 48.3 | 4,121 |
| Tanzania | 4.9 | 1.9 | ^b | 42.1 | 1.7 | N/A | N/A | N/A | 14.7 | 29.1 | 0.9 | 3.4 | 1.3 | 50.6 | 8,176 |

Abbreviations: ACO, assistant clinical officer; AMO, assistant medical officer; MCH aide, maternal and child health aide; TBA, traditional birth attendant.

Sources: 2014 Kigoma Reproductive Health Survey, Comparison: 2010 Tanzania Demographic and Health Survey.

^a Any skilled attendant includes: ACO, AMO, clinical officer, doctor; MCH aide, medical attendant; nurse assistant, TBA; or trained nurse/midwife.

^b The 2010 Tanzania Demographic and Health Survey combined the categories of clinical officer and ACO. Results for both categories are shown under clinical officer.

Birthweight

Globally, about 16% of all babies born in 2013 were classified as low birthweight (<2.5kg).⁴ Low birthweight is an important newborn health indicator, as it may be a sign of reduced blood flow or poor nutrition in the womb, both of which can increase the risk of death in the early months and years of a child's life. Low birthweight infants who survive may have impaired immune function and increased risk of disease, are likely to remain undernourished, and may have physical and developmental delays.⁵

Women in Kigoma were asked whether their most recently born (since January 2009) baby was weighed at birth and if they remembered his or her birthweight. Among the 86.3% reporting a known birthweight, only 5.8% were reported as low birthweight (Table 5.19). Consistent with other studies, a greater percentage of babies with a low birthweight were girls. Additionally, a greater percentage of low birthweight babies were born to first-time mothers or to women who had attended some or no primary school. Interestingly, a higher percentage of urban women reported low birthweight babies weighing < 2.5kg (7.5%) than did rural women (5.5%).

Table 5.19: Children with Low Birth Weight, by Selected Characteristics (Percent)Most Recent Live Births (with a Known Birth Weight)^a Since January 2009, of Women Aged 15-49 Years

| Characteristic | Births Weighing Less Than 2.5 Kg (%) | Number of Births |
|------------------------------|---|---------------------|
| Sex of baby | | |
| Boy | 4.8 | 1,034 |
| Girl | 6.9 | 1,058 |
| Residence | | |
| Urban | 7.5 | 402 |
| Rural | 5.5 | 1,690 |
| Age group (yr) | | |
| < 25 | 6.4 | 738 |
| 25-34 | 5.2 | 844 |
| 35-49 | 6.1 | 510 |
| Education level | | |
| No education | 6.1 | 571 |
| Some primary | 8.0 | 309 |
| Completed primary | 5.3 | 1,071 |
| Attended secondary or higher | 4.1 | 141 |
| Wealth tercile | | |
| Low | 6.3 | 677 |
| Middle | 5.9 | 715 |
| High | 5.4 | 700 |
| Order of Live Births | | |
| 1 | 8.5 | 376 |
| 2 | 5.9 | 308 |
| 3 | 4.7 | 289 |
| 4 | 6.4 | 286 |
| 5 | 5.6 | 226 |
| 6 | 4.7 | 191 |
| 7 | 5.1 | 147 |
| 8 | 2.6 | 123 |
| 9 | 2.9 | 80 |
| 10 or more | 7.6 | 66 |
| Total | 5.8 | 2,092 |

Source: 2014 Kigoma Reproductive Health Survey.

^a 86.3% of births reported a known birthweight.

Vital Registration

Vital registration allows countries to track all births and deaths and to identify the most pressing health issues. While many countries have estimates of births and deaths, accurate and complete vital registration is critical to truly understanding countries' health situations. The Kigoma RHS asked women about birth certificates issued for their most recent live birth since January 2009. Only 6.4% of all babies were reported to have a birth certificate (Table 5.20). Birth certificates were more common for boys (7.0%), as well as for babies born to women who resided in urban settings (14.9%), had attended secondary education or higher (28.1%), were in the highest wealth tercile (13.3%), and delivered in a health facility (10.1%).

Table 5.20: Birth Registration, by Selected Characteristics (Percent)

Most Recent Live Births Since January 2009, of Women Aged 15-49 Years

| | Child Has Birth Certificate (%) | Number of Births |
|--------------------------------|---------------------------------|------------------|
| Sex of baby | | |
| Boy | 7.0 | 1,204 |
| Girl | 5.8 | 1,224 |
| Residence | | |
| Urban | 14.9 | 438 |
| Rural | 4.6 | 1,990 |
| Age group (yr) at birth | | |
| < 25 | 5.7 | 842 |
| 25-34 | 7.8 | 992 |
| 35-49 | 5.1 | 594 |
| Education level | | |
| No education | 3.7 | 705 |
| Some primary | 4.6 | 369 |
| Completed primary | 6.1 | 1,207 |
| Attended secondary or higher | 28.1 | 147 |
| Wealth tercile | | |
| Low | 3.4 | 840 |
| Middle | 3.4 | 836 |
| High | 13.3 | 752 |
| Place of delivery | | |
| Health facility | 10.1 | 1,234 |
| Home | 2.8 | 1,104 |
| In transit/other/missing | 3.4 | 90 |
| Total | 6.4 | 2,428 |

Source: 2014 Kigoma Reproductive Health Survey.

5.4 Postnatal

The postnatal period, from delivery of the placenta to 42 days (6 weeks) after birth, is an important time period for the health of the mother and the infant. Annually, an estimated 125,000 women and 870,000 newborns worldwide die in the first week after birth.⁶ Postnatal care is important for identifying and treating complications arising from delivery and for providing the mother with information on how to care for herself and her infant. This critical time period is also when health coverage and programs are often least available compared with antenatal and pregnancy care.

Breastfeeding

Early initiation of breastfeeding is essential to the health of the newborn. WHO and the United Nations Children's Fund (UNICEF) recommend exclusive breastfeeding for the first 6 months, and continued breastfeeding, with complementary foods, up to 2 years of age or beyond. In addition, WHO and UNICEF recommend that breastfeeding be initiated within the first hour of life. Nearly all women in Kigoma (98.8%) reported having ever breastfed with their most recent live birth (Table 5.21). The percentage of women who breastfed their newborn during the first day of life was also very high (97.1%), though it was lower for breastfeeding within 1 hour of birth (81.2%). Women with secondary education or higher had the lowest frequency of breastfeeding within the first hour (68.0%).

Table 5.21: Breastfeeding, by Selected Characteristics (Percent)

Most Recent Live Births Since January 2009, of Women Aged 15–49 Years

| | Ever Breastfed Most Recent Live Birth (%) | Number of Births | Breastfeeding Initiation, Among Ever Breastfed (%) | | Number of Births |
|------------------------------|---|------------------|--|--------------|------------------|
| | | | Within an Hour | Within a Day | |
| Sex of baby | | | | | |
| Boy | 99.0 | 1,204 | 78.8 | 97.2 | 1,191 |
| Girl | 98.6 | 1,224 | 83.5 | 97.1 | 1,207 |
| Residence | | | | | |
| Urban | 98.8 | 438 | 80.4 | 96.3 | 433 |
| Rural | 98.8 | 1,990 | 81.3 | 97.3 | 1,965 |
| Age group (yr) at birth | | | | | |
| < 25 | 98.5 | 842 | 81.7 | 96.7 | 831 |
| 25-34 | 98.8 | 992 | 80.2 | 97.4 | 979 |
| 35-49 | 99.1 | 594 | 82.0 | 97.3 | 588 |
| Education level | | | | | |
| No education | 99.1 | 705 | 82.2 | 97.5 | 699 |
| Some primary | 98.1 | 369 | 80.6 | 97.5 | 362 |
| Completed primary | 98.7 | 1,207 | 82.3 | 97.2 | 1,191 |
| Attended secondary or higher | 99.5 | 147 | 68.0 | 93.7 | 146 |
| Wealth tercile | | | | | |
| Low | 99.0 | 840 | 80.9 | 96.5 | 832 |
| Middle | 98.3 | 836 | 83.4 | 98.0 | 822 |
| High | 99.0 | 752 | 78.9 | 96.8 | 744 |
| Place of delivery | | | | | |
| Health Facility | 98.7 | 1,234 | 81.1 | 96.1 | 1,218 |
| Home | 98.9 | 1,104 | 82.0 | 98.1 | 1,092 |
| In transit/other/missing | 98.1 | 90 | 72.4 | 98.0 | 88 |
| Total | 98.8 | 2,428 | 81.2 | 97.1 | 2,398 |

Source: 2014 Kigoma Reproductive Health Survey.

Postnatal Care

In Tanzania clinical practice, it is recommended that all postpartum women have postnatal checks at 48 hours, 7 days, 28 days, and 42 days. However, only 12.5% of all respondents indicated they received any postnatal checkup within 41 days of delivery (Table 5.22). Women in urban centers (19.7%), those who delivered in a facility (17.1%), those with secondary education or higher (23.5%), and those in the highest wealth tercile (17.6%) reported receiving postnatal checkups more frequently. Women with no education (10.4%), those in the lowest wealth tercile (9.0%), and those who gave birth at home (7.7%) received postnatal checkups least often.

Table 5.22: Women's Postnatal Checkups, by Selected Characteristics (Percent)
Births Since January 2009, of Women Aged 15-49 Years

| Characteristic | Received Postnatal Checkup Within 41 Days (%) | Number of Births |
|--------------------------------|--|------------------|
| Residence | | |
| Urban | 19.7 | 671 |
| Rural | 11.1 | 3,450 |
| Age group (yr) at birth | | |
| < 25 | 12.8 | 1,597 |
| 25-34 | 13.0 | 1,706 |
| 35-49 | 10.5 | 818 |
| Education level | | |
| No education | 10.4 | 1,316 |
| Some primary | 12.9 | 617 |
| Primary complete | 12.7 | 1,999 |
| Attended secondary or higher | 23.5 | 189 |
| Wealth tercile | | |
| Low | 9.0 | 1,486 |
| Middle | 12.0 | 1,472 |
| High | 17.6 | 1,163 |
| Place of delivery | | |
| Health facility | 17.1 | 1,982 |
| Home | 7.7 | 2,002 |
| In transit/other/missing | 19.5 | 137 |
| Total | 12.5 | 4,121 |
| Tanzania | 35.4 | 5,519 |

Source: 2014 Kigoma Reproductive Health Survey, Comparison: 2010 Tanzania Demographic and Health Survey.

Of women who had a postnatal checkup within 41 days of delivery, the checkup was often done within 48 hours of delivery (41.3%), particularly for women with no education (49.5%) compared with women having secondary education or more (23.2%) (Table 5.23). Overall, dispensaries were the most frequent site for postnatal checkups (42.4%) (rural, 48.9%; urban, 22.5%) (Table 5.24). Women with no education, those in the lowest wealth tercile, and those who had home deliveries used dispensaries most frequently (44.8%, 54.9%, and 48.6%, respectively).

Table 5.23: Timing of Women's Postnatal Checkups, According to Selected Characteristics (Percent Distribution)
Births Since January 2009, of Women Aged 15-49 Years Receiving a Postnatal Checkup

| | Postnatal Checkup: Time After Delivery (%) | | | | | Number of Births |
|------------------------------|--|-----------------|-----------|------------|-------|------------------|
| | Within 48 Hrs | 48 Hrs - 6 Days | 7-27 Days | 28-41 Days | Total | |
| Residence | | | | | | |
| Urban | 40.5 | 15.1 | 31.5 | 12.9 | 100.0 | 129 |
| Rural | 41.6 | 21.7 | 29.7 | 7.0 | 100.0 | 397 |
| Age group (yr) at birth | | | | | | |
| < 25 | 42.9 | 16.3 | 32.0 | 8.7 | 100.0 | 211 |
| 25-34 | 39.8 | 23.0 | 29.3 | 7.9 | 100.0 | 226 |
| 35-49 | 41.0 | 22.5 | 27.2 | 9.3 | 100.0 | 89 |
| Education level | | | | | | |
| No education | 49.5 | 22.8 | 22.5 | 5.2 | 100.0 | 138 |
| Some primary | 45.5 | 17.2 | 30.9 | 6.4 | 100.0 | 84 |
| Completed primary | 38.5 | 19.9 | 32.6 | 9.0 | 100.0 | 259 |
| Attended secondary or higher | 23.2 | 17.5 | 39.6 | 19.7 | 100.0 | 45 |
| Wealth tercile | | | | | | |
| Low | 38.7 | 23.4 | 28.3 | 9.7 | 100.0 | 136 |
| Middle | 47.8 | 20.4 | 25.7 | 6.0 | 100.0 | 183 |
| High | 37.4 | 17.5 | 35.3 | 9.7 | 100.0 | 207 |
| Place of delivery | | | | | | |
| Health facility | 34.6 | 18.4 | 36.1 | 10.9 | 100.0 | 347 |
| Home | 49.2 | 24.6 | 21.5 | 4.7 | 100.0 | 153 |
| In transit/other/missing | 77.4 | 14.4 | 8.2 | 0.0 | 100.0 | 26 |
| Total | 41.3 | 20.1 | 30.2 | 8.4 | 100.0 | 526 |

Source: 2014 Kigoma Reproductive Health Survey.

Table 5.24: Place of Woman's Postnatal Checkup, by Selected Characteristics (Percent Distribution)

Births Since January 2009, of Women Aged 15-49 Years Receiving a Postnatal Checkup

| Characteristic | Postnatal Checkup Place | | | | | | | Number of Births |
|------------------------------|-------------------------|----------------------|-------------------|------|-------|----------------------|-------|------------------|
| | Kigoma Hospital | Kigoma Health Center | Kigoma Dispensary | Home | Other | Not in Kigoma Region | Total | |
| Residence | | | | | | | | |
| Urban | 45.1 | 23.7 | 22.5 | 3.0 | 0.0 | 5.8 | 100.0 | 129 |
| Rural | 15.5 | 15.5 | 48.9 | 16.1 | 0.2 | 3.7 | 100.0 | 397 |
| Age group (yr) at birth | | | | | | | | |
| < 25 | 24.0 | 22.4 | 34.6 | 11.9 | 0.0 | 7.0 | 100.0 | 211 |
| 25-34 | 21.1 | 16.0 | 47.3 | 12.9 | 0.3 | 2.4 | 100.0 | 226 |
| 35-49 | 24.6 | 8.2 | 50.4 | 15.3 | 0.0 | 1.5 | 100.0 | 89 |
| Education level | | | | | | | | |
| No education | 14.8 | 19.3 | 44.8 | 18.5 | 0.0 | 2.5 | 100.0 | 138 |
| Some primary | 23.1 | 18.1 | 42.6 | 11.0 | 0.0 | 5.2 | 100.0 | 84 |
| Completed primary | 22.2 | 17.4 | 45.6 | 11.9 | 0.2 | 2.7 | 100.0 | 259 |
| Attended secondary or higher | 52.2 | 12.2 | 15.5 | 3.4 | 0.0 | 16.8 | 100.0 | 45 |
| Wealth tercile | | | | | | | | |
| Low | 8.6 | 13.1 | 54.9 | 19.0 | 0.0 | 4.4 | 100.0 | 136 |
| Middle | 17.2 | 14.9 | 47.0 | 18.4 | 0.3 | 2.1 | 100.0 | 183 |
| High | 37.4 | 22.9 | 30.0 | 3.9 | 0.0 | 5.9 | 100.0 | 207 |
| Place of delivery | | | | | | | | |
| Health facility | 33.8 | 21.9 | 37.7 | 0.5 | 0.0 | 6.0 | 100.0 | 347 |
| Home | 3.8 | 7.0 | 48.6 | 39.3 | 0.0 | 1.2 | 100.0 | 153 |
| In transit/other/missing | 0.0 | 25.1 | 62.6 | 10.1 | 2.2 | 0.0 | 100.0 | 26 |
| Total | 22.9 | 17.6 | 42.4 | 12.8 | 0.1 | 4.2 | 100.0 | 526 |

Source: 2014 Kigoma Reproductive Health Survey.

Tanzanian national guidelines also require all neonates to have a checkup within 2 months of birth. Overall, 85.6% of babies had a postnatal checkup within the advised 2-month timeframe (Table 5.25). Boys (86.7%), babies in rural settings (86.1%), and those born to women with secondary education or higher (90.3%) were found to have slightly higher frequencies of postnatal checkups.

Table 5.25: Child Received Postnatal Checkup, by Selected Characteristics (Percent)

Most Recent Live Births Since January 2009 Where the Baby Survived, of Women Aged 15-49 Years

| Characteristic | Baby Received Postnatal Checkup Within 2 Months of Birth (%) | Number of Births |
|--------------------------------|--|------------------|
| Sex of baby | | |
| Boy | 86.7 | 1,196 |
| Girl | 84.6 | 1,214 |
| Residence | | |
| Urban | 83.4 | 434 |
| Rural | 86.1 | 1,976 |
| Age group (yr) at birth | | |
| < 25 | 86.1 | 838 |
| 25-34 | 84.5 | 984 |
| 35-49 | 87.0 | 588 |
| Education level | | |
| No education | 83.2 | 701 |
| Some primary | 82.6 | 365 |
| Completed primary | 87.5 | 1,199 |
| Attended secondary or higher | 90.3 | 145 |
| Wealth tercile | | |
| Low | 84.1 | 834 |
| Middle | 87.6 | 829 |
| High | 85.1 | 747 |
| Place of delivery | | |
| Health facility | 84.1 | 1,226 |
| Home | 86.7 | 1,095 |
| In transit/other/missing | 91.8 | 89 |
| Total | 85.6 | 2,410 |

Source: 2014 Kigoma Reproductive Health Survey.

Pregnancy and Delivery Complications

Complications from pregnancy and delivery, such as infection, bleeding, and preeclampsia, can occur during the postnatal period. Rapid identification and treatment are critical to saving the life of the mother and preventing morbidity and long-term disability. The Kigoma RHS asked women to list any complications they had in the 6 weeks following delivery.

Table 5.26 provides an overview of the complications by key demographic variables. The most frequent complications included pelvic pain (17.5%), high fever (15.2%), painful urination (11.8%), and severe bleeding (11.1%).

Table 5.26: Complications Experienced Within 6 Weeks of Birth, by Selected Characteristics (Percent)

Most Recent Births Since January 2009, of Women Aged 15-49 Years

| Characteristic | Severe Bleeding | Bad-Smelling Vaginal Discharge | Infection of Surgical Wound | Faint/Coma | High Fever (39-40C) | Painful Urination | Painful Uterus (Pelvic Pain) | Breast Infection | Continuous Leaking from Vagina | | Number of Births | |
|------------------------------|-----------------|--------------------------------|-----------------------------|------------|---------------------|-------------------|------------------------------|------------------|--------------------------------|-----------------------|------------------|-------|
| | | | | | | | | | of Urine ^a | of Feces ^a | | |
| Residence | | | | | | | | | | | | |
| Urban | 9.4 | 4.2 | 1.2 | 2.6 | 16.4 | 12.3 | 19.7 | 1.8 | 0.7 | 0.0 | 1.6 | 432 |
| Rural | 11.5 | 6.7 | 0.8 | 1.9 | 14.9 | 11.7 | 17.1 | 2.8 | 0.8 | 0.3 | 1.0 | 1,978 |
| Age group (yr) at birth | | | | | | | | | | | | |
| < 25 | 9.5 | 6.2 | 1.4 | 1.6 | 17.0 | 14.3 | 16.8 | 3.5 | 0.7 | 0.3 | 0.8 | 838 |
| 25-34 | 11.7 | 6.6 | 0.7 | 2.2 | 14.5 | 11.3 | 19.2 | 2.2 | 1.0 | 0.1 | 1.3 | 972 |
| 35-49 | 12.8 | 5.7 | 0.4 | 2.6 | 13.3 | 8.3 | 15.8 | 2.1 | 0.6 | 0.2 | 1.5 | 600 |
| Education level | | | | | | | | | | | | |
| No education | 12.4 | 6.4 | 0.5 | 1.9 | 13.2 | 10.5 | 17.3 | 2.3 | 1.3 | 0.2 | 0.9 | 697 |
| Some primary | 12.8 | 8.5 | 0.7 | 3.6 | 18.3 | 12.9 | 21.4 | 3.2 | 0.5 | 0.2 | 0.8 | 369 |
| Completed primary | 10.4 | 5.8 | 0.9 | 1.5 | 14.9 | 11.2 | 15.8 | 3.0 | 0.5 | 0.2 | 1.4 | 1,198 |
| Attended secondary or higher | 6.6 | 3.1 | 3.0 | 2.9 | 19.3 | 20.1 | 22.9 | 0.0 | 1.6 | 1.0 | 1.1 | 146 |
| Wealth tercile | | | | | | | | | | | | |
| Low | 12.5 | 7.5 | 0.2 | 2.1 | 16.3 | 12.8 | 16.7 | 2.5 | 0.9 | 0.3 | 0.7 | 834 |
| Middle | 12.5 | 6.2 | 1.0 | 2.3 | 15.6 | 10.8 | 18.4 | 3.5 | 0.9 | 0.3 | 1.4 | 829 |
| High | 8.0 | 4.8 | 1.4 | 1.7 | 13.4 | 11.8 | 17.4 | 1.9 | 0.6 | 0.1 | 1.4 | 747 |
| Place of delivery | | | | | | | | | | | | |
| Health facility | 11.5 | 5.9 | 1.7 | 2.8 | 15.7 | 13.3 | 17.9 | 1.8 | 1.1 | 0.2 | 1.1 | 1,225 |
| Home | 10.4 | 6.3 | 0.0 | 1.4 | 14.9 | 10.4 | 17.2 | 3.6 | 0.5 | 0.2 | 1.2 | 1,094 |
| In transit/other/missing | 14.4 | 9.3 | 0.0 | 0.0 | 10.8 | 8.7 | 16.2 | 1.3 | 0.0 | 0.0 | 0.0 | 91 |
| Total | 11.1 | 6.3 | 0.9 | 2.0 | 15.2 | 11.8 | 17.5 | 2.7 | 0.8 | 0.2 | 1.1 | 2,410 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Leaking from vagina, indicating that the woman had an obstetric fistula that was caused by prolonged labor.

Family Planning Counseling (Receipt, Location, Timing)

Family planning is an essential reproductive health service. According to WHO, “Family planning allows spacing of pregnancies and can delay pregnancies in young women at increased risk of health problems and death from early childbearing, and can prevent pregnancies among older women who also face increased risks. Family planning enables women who wish to limit the size of their families to do so. Evidence suggests that women who have more than four children are at increased risk of maternal mortality.”⁷

Overall, 74.1% of women reported receiving family planning counseling during their most recent pregnancy or postpartum period. A higher percentage of women in urban (81.4%) than rural settings (72.5%) reported receiving family planning counseling (Table 5.27). Women younger than age 25, those with less education, and those in the lowest wealth tercile reported receiving counseling less frequently.

Table 5.27: Family Planning Counseling During Pregnancy (Including After Delivery), by Selected Characteristics (Percent)

Most Recent Births Since January 2009, of Women Aged 15-49 Years

| Characteristic | Received Family Planning Counseling (%) | Number of Births |
|--------------------------------|---|------------------|
| Residence | | |
| Urban | 81.4 | 432 |
| Rural | 72.5 | 1,978 |
| Age group (yr) at birth | | |
| < 25 | 67.8 | 838 |
| 25-34 | 78.2 | 972 |
| 35-49 | 77.4 | 600 |
| Education level | | |
| No education | 68.9 | 697 |
| Some primary | 69.0 | 369 |
| Completed primary | 78.5 | 1,198 |
| Attended secondary or higher | 76.6 | 146 |
| Wealth tercile | | |
| Low | 70.2 | 834 |
| Middle | 74.3 | 829 |
| High | 78.3 | 747 |
| Place of delivery | | |
| Health facility | 77.3 | 1,225 |
| Home | 70.1 | 1,094 |
| In transit/other/missing | 80.2 | 91 |
| Total | 74.1 | 2,410 |

Source: 2014 Kigoma Reproductive Health Survey.

Women who received family planning counseling were asked to recount when they received the counseling: during ANC, at the time of delivery, or at the postpartum checkup. Women could select all time periods that were applicable. The majority of women received family planning counseling during ANC (82.0%), more than a quarter received counseling in the postpartum checkup (28.1%), and a very low percentage of women (2.0%) received counseling at the time of delivery (Table 5.28). More rural than urban women reported receiving family planning counseling during the antenatal period (84.0% and 73.9%, respectively); more women aged 35-49 years (84.1%) reported receiving such counseling compared with younger women (79.7%). Conversely, as wealth increased, family planning counseling in the antenatal setting declined. A greater percentage of urban women reported receiving postpartum family planning counseling (40.8%), compared with rural women (25.1%). This was also true for women delivering in health facilities (32.6%) compared with those who delivered at home (23.6%).

Table 5.28: Timing of Family Planning Counseling Received During Pregnancy or After Delivery, by Selected Characteristics (Percent)

Most Recent Births Since January 2009 that Received Family Planning Counseling During Pregnancy, of Women Aged 15-49 Years^a

| Characteristic | Timing of Counseling Received (%) | | | Number of Births |
|------------------------------|-----------------------------------|------------------|--------------------|------------------|
| | Antenatal Care | Time of Delivery | Postpartum Checkup | |
| Residence | | | | |
| Urban | 73.9 | 1.5 | 40.8 | 348 |
| Rural | 84.0 | 2.1 | 25.1 | 1,454 |
| Age group (yr) at birth | | | | |
| < 25 | 79.7 | 2.0 | 29.0 | 579 |
| 25-34 | 82.8 | 1.5 | 27.7 | 758 |
| 35-49 | 84.1 | 2.7 | 27.5 | 465 |
| Education level | | | | |
| No education | 85.4 | 1.6 | 23.3 | 485 |
| Some primary | 80.0 | 2.4 | 29.9 | 261 |
| Completed primary | 82.3 | 2.1 | 28.7 | 943 |
| Attended secondary or higher | 69.8 | 1.5 | 40.7 | 113 |
| Wealth tercile | | | | |
| Low | 86.0 | 1.2 | 24.2 | 592 |
| Middle | 83.2 | 2.9 | 27.1 | 621 |
| High | 76.8 | 1.7 | 33.1 | 589 |
| Place of delivery | | | | |
| Health Facility | 78.4 | 2.5 | 32.6 | 947 |
| Home | 85.2 | 1.5 | 23.6 | 783 |
| In transit/other/missing | 94.7 | 0.0 | 18.9 | 72 |
| Total | 82.0 | 2.0 | 28.1 | 1,802 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Excludes three women who did not remember the timing.

Among women who reported receiving postnatal family planning counseling for their most recent births since 2009, the most common location for both urban and rural women (44.0% and 78.2%, respectively) was a dispensary (Table 5.29). However, many urban residents received postnatal family planning counseling at Kigoma Region hospitals (34.3%) and health centers (22.8%). Women with secondary education or higher and those in the highest wealth tercile tended to receive postnatal family planning counseling at hospitals, and women in the lower educational and wealth terciles tended to receive counseling at dispensaries.

Table 5.29: Place Where Postpartum Family Planning Counseling Was Received, by Selected Characteristics (Percent)

Most Recent Births Since January 2009 that Received Postpartum Family Planning Counseling, of Women Aged 15-49 Years^a

| | Kigoma Hospital (%) | Kigoma Health Center (%) | Kigoma Dispensary (%) | Total Number of Births |
|--------------------------------|------------------------|-----------------------------|--------------------------|---------------------------|
| Residence | | | | |
| Urban | 34.3 | 22.8 | 44.0 | 134 |
| Rural | 11.6 | 10.1 | 78.2 | 393 |
| Age group (yr) at birth | | | | |
| < 25 | 21.0 | 14.3 | 65.2 | 172 |
| 25-34 | 17.8 | 11.5 | 71.0 | 216 |
| 35-49 | 12.8 | 15.9 | 71.1 | 139 |
| Education level | | | | |
| No education | 15.7 | 13.5 | 69.4 | 117 |
| Some primary | 19.1 | 14.4 | 66.9 | 81 |
| Completed primary | 14.2 | 13.5 | 73.8 | 284 |
| Attended secondary or higher | 43.5 | 12.0 | 41.4 | 45 |
| Wealth tercile | | | | |
| Low | 10.0 | 9.9 | 80.9 | 147 |
| Middle | 13.2 | 8.6 | 79.5 | 181 |
| High | 27.8 | 20.7 | 50.2 | 199 |
| Place of delivery | | | | |
| Health facility | 27.6 | 17.0 | 57.5 | 315 |
| Home | 2.9 | 7.5 | 87.1 | 198 |
| In transit/other/missing | ^b | ^b | ^b | 14 |
| Total | 17.8 | 13.5 | 69.0 | 527 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Ten women received counseling at a facility outside of Kigoma, one at home, and three from a community-based distribution worker.

^b Fewer than 25 women responded.

References

1. World Health Organization (WHO). *Pregnancy, Childbirth, Postpartum and Newborn Care: a Guide for Essential Practice*. 2nd rev. ed. Geneva: WHO; 2009.
2. WHO. *A Strategic Framework for Malaria Prevention and Control During Pregnancy in the Africa Region*. Brazzaville, Republic of the Congo: WHO Regional Office for Africa; 2004.
3. WHO. *Making Pregnancy Safer: the Critical Role of the Skilled Attendant: a Joint Statement by WHO, ICM (International Confederation of Midwives) and FIGO (International Federation of Gynecology and Obstetrics)*. Geneva: WHO; 2004.
Available at: <http://whqlibdoc.who.int/publications/2004/9241591692.pdf?ua=1>.
4. WHO. *Managing Complications in Pregnancy and Childbirth: a Guide for Midwives and Doctors*. Geneva: WHO; 2007. Available at: http://whqlibdoc.who.int/publications/2007/9241545879_eng.pdf?ua=1.
5. United Nations Children's Fund (UNICEF). Undernourishment in the womb can lead to diminished potential and predispose infants to early death. New York: UNICEF; 2014. Available at: <http://data.unicef.org/nutrition/low-birthweight#sthash.f5ZShKbX.dpufA>.
6. Warren C, Daly P, Toure L, Mongi P. Postnatal Care. In: Lawn J, Kerber K, eds. *Opportunities for Africa's Newborns*. Cape Town, South Africa: Partnership for Maternal, Newborn, and Child Health; 2006.
Available at: http://www.who.int/pmnch/media/publications/aonsectionIII_4.pdf.
7. WHO. Fact sheet number 351: Family planning. Geneva: WHO Media Centre; 2013. Available at: <http://www.who.int/mediacentre/factsheets/fs351/en>.

CHAPTER 6: INFANT, CHILD, AND PERINATAL MORTALITY

This chapter presents estimates of the levels and differentials in perinatal, infant, and child mortality from the 2014 Kigoma Reproductive Health Survey. Mortality estimates were derived from data collected on each woman's complete history of pregnancies. Such information included pregnancy outcomes, dates of pregnancy termination, whether live born children were still living, and age at death for live born children who died. This information was used to estimate mortality rates for specific periods of time. Age-specific rates are defined as follows:

- **Infant mortality** (${}_1q_0$): Probability of baby dying before its first birthday.
- **Neonatal mortality**: Probability of baby dying within its first 28 days of life.
- **Postneonatal mortality**: Probability of baby dying between 28 days and 1 year (calculated as the difference between neonatal and infant mortality).
- **Child mortality** (${}_4q_1$): Probability of child dying between its first and fifth birthdays.
- **Under-5 mortality** (${}_5q_0$): probability of child dying before its fifth birthday.
- **Stillbirth rate**: Ratio of stillbirths to all births (live births + stillbirths).
- **Early neonatal mortality**: Probability of baby dying within the first week after birth (7 days).
- **Perinatal mortality**: Ratio of perinatal deaths (stillbirths + early neonatal deaths) to all births (live births + stillbirths).

All rates are expressed as deaths per 1,000 live births, except for child mortality (per 1,000 survivors to age 1 year), and stillbirth and perinatal mortality (both are per 1,000 live births + stillbirths). Because of the relatively small sample size for this survey, the infant and child mortality estimates are presented with 95% confidence intervals (CI). Stillbirths are defined as births after 22 or more weeks of gestation that show no signs of life after separation from the mother.

Table 6.1 shows infant, neonatal, postneonatal, child, and under-5 mortality rates in Kigoma for two 5-year periods: August 2004-July 2009 and August 2009-July 2014. As a point of reference, the table also includes the estimates from the 2010 Tanzania Demographic and Health Survey for all regions of Tanzania, including Kigoma, during the period 2005-2010. The Kigoma 2004-2009 estimates are close to the 2005-2010 national estimates. It is surprising, however, that the Kigoma estimates are not higher than those for the whole country, since women in Kigoma are less educated and reside in more rural areas than women in the country as a whole.

Comparing the estimates for Kigoma during 2004-2009 and 2009-2014, the survey estimated a substantial decline in infant mortality from 52 (CI: 43-62) to 30 (CI: 22-37) deaths per 1,000 births. There was virtually no change, however, in child mortality (from 29 to 27 deaths between the first and fifth birthdays per 1,000 children surviving to their first birthday). This was unexpected since mortality among children aged 1-4 years usually declines earlier and faster than infant mortality. The unexpected age pattern of decline suggests there was some omission of infant deaths in the more recent period. Indirect estimates of infant mortality, based on mean numbers of children ever born and surviving classified by age of the mother, indicate a less pronounced decline from 67 to 52 per 1,000 from 2007 to 2012. This is further evidence that the apparent decline from the direct estimates may be overstated.

Table 6.1: Infant,^a Neonatal,^a Postneonatal,^a Child,^b and Under-5 Years^a Mortality Rates for 5-Year Periods Prior to Survey

| Age | Tanzania (DHS: 2005-2010) | | | Kigoma (RHS: 2004-2009) | | | Kigoma (RHS: 2009-2014) | | |
|---|---------------------------|-----------|-----------|-------------------------|-----------|-----------|-------------------------|-----------|-----------|
| | Estimate | 95% CI | | Estimate | 95% CI | | Estimate | 95% CI | |
| | | Low | High | | Low | High | | Low | High |
| Infant (${}_1q_0$)^c | 51 | 44 | 57 | 52 | 43 | 62 | 30 | 22 | 37 |
| Neonatal | 26 | 21 | 31 | 25 | 19 | 32 | 16 | 10 | 21 |
| Postneonatal | 25 | 21 | 29 | 27 | 21 | 33 | 14 | 10 | 18 |
| 1 to 4 years (${}_4q_1$)^c | 32 | 26 | 38 | 29 | 22 | 36 | 27 | 21 | 34 |
| Under 5 years (${}_5q_0$)^c | 81 | 72 | 90 | 80 | 68 | 91 | 56 | 47 | 65 |

Abbreviations: CI, confidence interval; DHS, 2010 Demographic and Health Survey; RHS, Reproductive Health Survey.

Sources: 2014 Kigoma RHS, Comparison: 2010 Tanzania DHS.

^a Per 1,000 live births.

^b Per 1,000 survivors to age 1 year.

^c ${}_1q_0$, infant mortality (probability of baby dying before its first birthday); ${}_4q_1$, child mortality (probability of child dying between its first and fifth birthdays); ${}_5q_0$, under-5 mortality (probability of child dying before its fifth birthday).

Table 6.2 presents differentials in the estimated values for mortality among infants and children under age 5 years for various characteristics, based on information from the survey for a 10-year period (August 2004-July 2014). The differentials by mother's area of residence and education level were unexpected, the rural infant mortality rate (37 deaths per 1,000) was lower than the urban rate (55 deaths per 1,000), and the rate for children of women with no education (45 deaths per 1,000) was lower than that for children born to women with some primary education (52 deaths per 1,000).

While these differentials are not statistically significant, they do suggest that there may be some omission of deaths by rural women with no education. The differentials by birth order, mother's age at the time of birth, and length of the previous birth interval did conform to expected patterns, but they were generally not statistically significant. One result that was indeed statistically significant was that the risk of infant and child mortality for births after intervals of 24-47 months was lower than the risk for either shorter or longer birth intervals. The risk was also lower than for first births.

Table 6.2: Differentials in Infant and Under-5 Years Mortality for the 10-Year Period Prior to Survey^a

| Characteristic | Infant Mortality Rates | | | Under-5 Years Mortality Rates | | |
|------------------------------|------------------------|--------|------|-------------------------------|--------|------|
| | Estimate | 95% CI | | Estimate | 95% CI | |
| | | Low | High | | Low | High |
| Residence | | | | | | |
| Urban | 55 | 36 | 73 | 80 | 56 | 104 |
| Rural | 37 | 31 | 44 | 65 | 57 | 73 |
| Education level | | | | | | |
| No education | 45 | 34 | 56 | 76 | 63 | 89 |
| Some primary | 52 | 35 | 70 | 79 | 56 | 101 |
| Completed primary or higher | 33 | 27 | 40 | 57 | 49 | 66 |
| Wealth tercile | | | | | | |
| Low | 45 | 36 | 54 | 72 | 60 | 83 |
| Middle | 32 | 23 | 41 | 58 | 46 | 70 |
| High | 45 | 32 | 57 | 72 | 55 | 90 |
| Mother's age at birth (yr) | | | | | | |
| < 20 | 48 | 30 | 67 | 76 | 55 | 96 |
| 20-29 | 37 | 29 | 45 | 65 | 55 | 76 |
| 30-49 | 42 | 32 | 52 | 66 | 55 | 78 |
| Previous birth interval (mo) | | | | | | |
| First births | 50 | 34 | 67 | 73 | 54 | 91 |
| < 24 | 60 | 45 | 74 | 100 | 83 | 117 |
| 24-47 | 26 | 19 | 32 | 42 | 34 | 51 |
| 48+ | 50 | 34 | 67 | 100 | 78 | 123 |
| Birth order | | | | | | |
| 1 | 50 | 33 | 66 | 72 | 53 | 90 |
| 2-3 | 34 | 24 | 43 | 67 | 56 | 78 |
| 4-6 | 41 | 32 | 49 | 64 | 52 | 75 |
| 7+ | 41 | 24 | 57 | 68 | 48 | 88 |
| Total | 40 | 34 | 46 | 67 | 59 | 75 |

Abbreviation: CI, confidence interval.

Source: 2014 Kigoma Reproductive Health Survey.

^a Deaths per 1,000 live births.

Table 6.3 shows the results of the 2014 Kigoma Reproductive Health Survey and the 2010 Tanzania Demographic and Health Survey for stillbirth, early neonatal, and perinatal mortality rates. Similar to infant and child mortality, Kigoma estimates (2004-2009) were close to the Tanzania estimates (2005-2010). Comparing the two 5-year periods in the Kigoma survey, the stillbirth rate saw virtually no change, whereas the early neonatal mortality rate declined from 23 to 12 deaths per 1,000 live births. The perinatal mortality rate declined from 39 to 29 perinatal deaths per 1,000 stillbirths + live births from 2004-2009 to 2009-2014.

Table 6.3: Stillbirth, Early Neonatal, and Perinatal Mortality Rates for 5-Year Periods Prior to Survey

| | Tanzania (DHS) | Kigoma (RHS) | |
|---------------------------------------|----------------|--------------|-----------|
| | 2005-2010 | 2004-2009 | 2009-2014 |
| Stillbirth rate ^a | 17 | 17 | 18 |
| Early neonatal mortality ^b | 19 | 23 | 12 |
| Perinatal mortality ^a | 36 | 39 | 29 |
| Number of births | 8,319 | 3,352 | 3,722 |

Abbreviations: DHS, 2010 Demographic and Health Survey; RHS, 2014 Kigoma Reproductive Health Survey.
Sources: 2014 Kigoma RHS, Comparison: 2010 Tanzania DHS.
^a Per 1,000 stillbirths and live births.
^b Per 1,000 live births.

Table 6.4 presents differentials in perinatal mortality for the entire 10-year period (2004-2014). As observed for infant and child mortality, the perinatal mortality rates were unexpectedly lower for rural vs urban women, as well as for women with no education vs those with some primary education.

One hypothesis for the possible underreporting of neonatal deaths is that women consider these to be stillbirths rather than live births. If so, the stillbirth rate should have been higher for women suspected of underreporting neonatal deaths (rural women and women with no education). The data do not indicate this, however. It seems more likely that pregnancies leading to stillbirths or early neonatal deaths were omitted from the pregnancy history than were pregnancies resulting in live births that survived the neonatal period.

Considering the relationships between perinatal mortality and reproductive patterns, the risk of perinatal death was greatest for first births (57 deaths per 1,000), births before the mother was age 20 years (53 deaths per 1,000) and births after short birth intervals (48 deaths per 1,000). Lower risks were estimated for births to women in their 20s (25 deaths per 1,000), second and third births (22 deaths per 1,000), and births after intervals of 24-47 months (19 deaths per 1,000).

Table 6.4: Stillbirth, Early Neonatal, and Perinatal Mortality Rates for the 10-Year Period Prior to Survey

| Characteristic | Stillbirth Rate ^a | Early Neonatal Mortality Rate ^b | Perinatal Mortality Rate ^a | Number of Stillbirths and Live Births |
|---|------------------------------|--|---------------------------------------|---------------------------------------|
| Residence | | | | |
| Urban | 23 | 21 | 44 | 1,182 |
| Rural | 16 | 16 | 32 | 5,892 |
| Education level | | | | |
| No education | 14 | 17 | 31 | 2,304 |
| Some primary | 26 | 23 | 49 | 1,075 |
| Completed primary or higher | 17 | 14 | 31 | 3,695 |
| Wealth tercile | | | | |
| Low | 18 | 17 | 35 | 2,525 |
| Middle | 17 | 16 | 33 | 2,522 |
| High | 17 | 17 | 34 | 2,027 |
| Mother's age at birth (yr) | | | | |
| < 20 | 29 | 24 | 53 | 922 |
| 20-29 | 12 | 13 | 25 | 3,555 |
| 30-49 | 21 | 19 | 40 | 2,597 |
| Birth order | | | | |
| 1 | 32 | 26 | 57 | 1,285 |
| 2-3 | 10 | 12 | 22 | 2,207 |
| 4-6 | 12 | 14 | 26 | 2,357 |
| 7+ | 27 | 21 | 47 | 1,225 |
| Previous pregnancy interval (mo) | | | | |
| First births | 32 | 26 | 57 | 1,239 |
| < 24 | 23 | 26 | 48 | 1,379 |
| 24-47 | 9 | 11 | 19 | 3,457 |
| 48+ | 22 | 12 | 34 | 999 |
| Total | 17 | 17 | 34 | 7,074 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Per 1,000 stillbirths and live births.^b Per 1,000 live births.

CHAPTER 7: OPINIONS ABOUT CONTRACEPTION AND FAMILY PLANNING

To best design family planning programs and disseminate contraception information, it is important to identify which women to target and how best to reach them. Other chapters detail women's fertility preferences, family planning knowledge and use, and maternal and perinatal health services used. This chapter provides insight into opinions about contraception, as well as access to and preferences for family planning information.

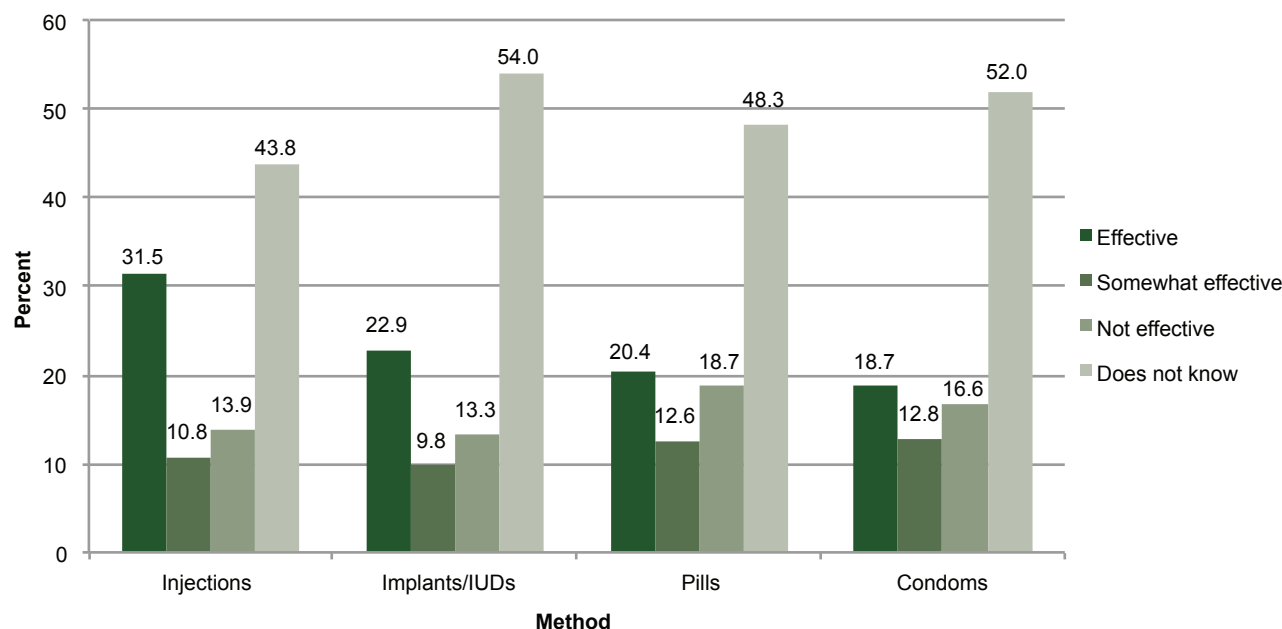
7.1 Opinions About Family Planning

Perceptions of Effectiveness of Contraceptives

During the 2010 Kigoma Reproductive Health Survey, Kigoma women aged 15-49 years were asked about their perceptions of contraceptive effectiveness, specifically whether they thought a method was *very effective*, *effective*, *somewhat effective*, or *not effective*. Women could indicate that they did not know about different methods' effectiveness. Responses of *very effective* and *effective* were combined into one response, *effective*. Table 7.1 and Figure 7.1 show women's perceptions about the effectiveness of four types of methods: pills, injections, condoms, and implants/intrauterine devices (IUDs).

A small percentage (18.7%-31.5%) of respondents was aware that these four methods were effective for preventing pregnancy. A greater proportion of women felt that injections were effective for preventing pregnancy than any of the other methods (Figure 7.1).

Figure 7.1: Perceived Effectiveness of Contraceptive Methods for Preventing Pregnancy Among Women Aged 15-49 Years, by Method (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

As expected, more women who had ever used a modern contraceptive method felt that each method was effective, compared with women who had never used modern contraception (Table 7.1). More than one-third of ever-users felt that pills (36.6%), condoms (34.1%), and implants/IUDs (39.2%) were effective, and nearly two-thirds felt that injections were effective (63.2%). In contrast, fewer than a fifth of women who had never used modern contraception felt that each method was effective (pill, 14.0%; injection, 18.9%; condom, 12.5%; implants/IUDs, 16.3%).

Table 7.1: Perceptions of Effectiveness of Contraceptive Methods, by Method and Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years

| Characteristic | Contraceptive Method (%) | | | | | | | | | | | | Number of Women | | | | | |
|------------------------------|--------------------------|--------------------|---------------|---------------|-----------|--------------------|---------------|---------------|-----------|--------------------|---------------|---------------|-----------------|---------------|--------------------|---------------|---------------|-------|
| | Pill | | | | Injection | | | | Condom | | | | | Implants/IUDs | | | | |
| | Effective | Somewhat Effective | Not Effective | Does Not Know | Effective | Somewhat Effective | Not Effective | Does Not Know | Effective | Somewhat Effective | Not Effective | Does Not Know | | Effective | Somewhat Effective | Not Effective | Does Not Know | |
| Residence | | | | | | | | | | | | | | | | | | Total |
| Urban | 27.4 | 13.2 | 21.2 | 38.2 | 38.4 | 11.8 | 15.4 | 34.3 | 24.3 | 15.1 | 19.4 | 41.1 | 30.6 | 11.4 | 13.8 | 44.1 | 100.0 | 808 |
| Rural | 18.7 | 12.4 | 18.1 | 50.8 | 29.9 | 10.5 | 13.5 | 46.1 | 17.3 | 12.2 | 15.8 | 54.6 | 21.0 | 9.4 | 13.2 | 56.4 | 100.0 | 3,108 |
| Age group (yr) | | | | | | | | | | | | | | | | | | |
| 15-19 | 11.5 | 7.1 | 13.1 | 68.2 | 16.6 | 7.4 | 10.6 | 65.4 | 11.3 | 8.9 | 13.4 | 66.5 | 11.6 | 6.7 | 9.6 | 72.2 | 100.0 | 865 |
| 20-24 | 19.0 | 11.9 | 19.4 | 49.6 | 32.5 | 9.2 | 13.8 | 44.4 | 22.7 | 10.7 | 16.9 | 49.7 | 23.9 | 8.8 | 14.6 | 52.8 | 100.0 | 716 |
| 25-29 | 24.9 | 13.5 | 21.6 | 40.0 | 38.3 | 12.9 | 15.2 | 33.7 | 22.5 | 14.2 | 17.6 | 45.7 | 28.0 | 11.2 | 15.1 | 45.7 | 100.0 | 637 |
| 30-34 | 22.6 | 18.2 | 20.3 | 38.9 | 40.0 | 12.7 | 14.8 | 32.6 | 19.5 | 17.6 | 17.8 | 45.2 | 28.8 | 11.9 | 13.2 | 46.0 | 100.0 | 525 |
| 35-39 | 28.9 | 16.1 | 20.3 | 34.8 | 41.6 | 11.3 | 14.8 | 32.3 | 23.1 | 13.9 | 17.9 | 45.2 | 29.2 | 13.4 | 13.4 | 44.0 | 100.0 | 487 |
| 40-44 | 23.6 | 15.7 | 24.1 | 36.6 | 35.9 | 15.6 | 17.9 | 30.6 | 17.5 | 17.2 | 20.1 | 45.2 | 26.1 | 9.9 | 18.4 | 45.7 | 100.0 | 416 |
| 45-49 | 23.2 | 10.9 | 16.4 | 49.6 | 26.8 | 11.2 | 14.3 | 47.7 | 17.3 | 11.9 | 15.0 | 55.7 | 21.9 | 10.3 | 11.5 | 56.4 | 100.0 | 270 |
| Education level | | | | | | | | | | | | | | | | | | |
| No education | 17.1 | 11.3 | 19.2 | 52.5 | 28.0 | 9.1 | 15.6 | 47.3 | 14.9 | 11.2 | 16.6 | 57.2 | 19.5 | 8.5 | 14.2 | 57.7 | 100.0 | 958 |
| Some primary | 18.4 | 11.2 | 17.4 | 53.0 | 27.4 | 10.4 | 13.6 | 48.5 | 15.9 | 10.6 | 16.6 | 56.9 | 17.1 | 8.8 | 13.9 | 60.2 | 100.0 | 627 |
| Completed primary | 21.9 | 13.8 | 19.5 | 44.8 | 34.6 | 11.5 | 13.8 | 40.0 | 19.6 | 13.9 | 17.4 | 49.1 | 25.2 | 11.1 | 13.5 | 50.2 | 100.0 | 1,926 |
| Attended secondary or higher | 25.0 | 12.3 | 15.6 | 47.2 | 32.7 | 11.7 | 10.2 | 45.4 | 28.3 | 14.5 | 12.2 | 44.9 | 29.4 | 8.2 | 9.4 | 53.0 | 100.0 | 405 |
| Wealth tercile | | | | | | | | | | | | | | | | | | |
| Low | 16.8 | 12.3 | 18.7 | 52.3 | 27.6 | 10.3 | 14.1 | 47.9 | 15.3 | 12.3 | 16.0 | 56.4 | 20.4 | 9.8 | 13.4 | 56.4 | 100.0 | 1,235 |
| Middle | 21.1 | 12.6 | 18.3 | 48.0 | 32.3 | 10.7 | 13.9 | 43.1 | 18.9 | 12.4 | 16.0 | 52.7 | 22.5 | 9.6 | 13.3 | 54.6 | 100.0 | 1,277 |
| High | 23.1 | 12.8 | 19.1 | 45.0 | 34.5 | 11.1 | 13.6 | 40.7 | 21.6 | 13.5 | 17.6 | 47.3 | 25.6 | 10.0 | 13.1 | 51.3 | 100.0 | 1,404 |
| Ever use of modern method | | | | | | | | | | | | | | | | | | |
| No | 14.0 | 10.3 | 18.8 | 57.0 | 18.9 | 9.7 | 15.4 | 56.0 | 12.5 | 10.8 | 17.7 | 59.0 | 16.3 | 9.1 | 14.0 | 60.6 | 100.0 | 2,758 |
| Yes | 36.6 | 18.3 | 18.4 | 26.7 | 63.2 | 13.4 | 10.0 | 13.4 | 34.1 | 17.6 | 13.7 | 34.5 | 39.2 | 11.5 | 11.6 | 37.7 | 100.0 | 1,158 |
| Total | 20.4 | 12.6 | 18.7 | 48.3 | 31.5 | 10.8 | 13.9 | 43.8 | 18.7 | 12.8 | 16.6 | 52.0 | 22.9 | 9.8 | 13.3 | 54.0 | 100.0 | 3,916 |

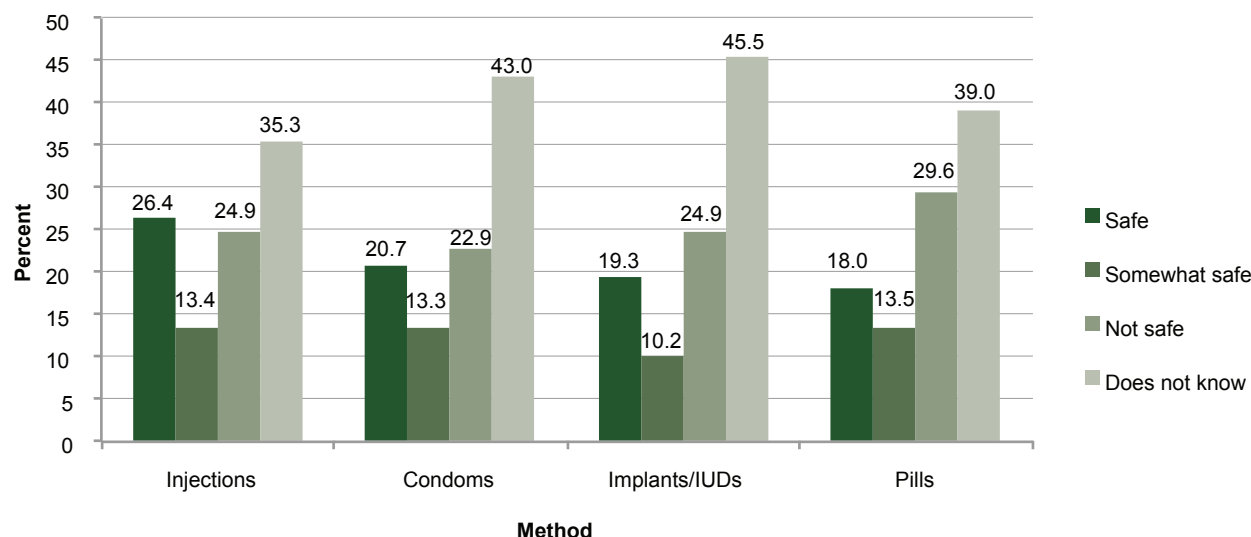
Abbreviation: IUD: intrauterine device.
Source: 2014 Kigoma Reproductive Health Survey.

About half of the women surveyed did not know about the effectiveness of each of the four methods. Women who were rural residents and those in the youngest age group (15-19 years) were particularly unaware of contraceptive effectiveness (Table 7.1); about two-thirds of women aged 15-19 years reported a lack of knowledge of the effectiveness of pills (68.2%), injections (65.4%), and condoms (66.5%); and nearly three-quarters did not know the effectiveness of implants/IUDs (72.2%).

Perceptions of Safety of Contraceptives

In addition to contraceptive methods' effectiveness for pregnancy prevention, women reported their perceptions of methods' safety based on the risk of developing health problems (Figure 7.2, Table 7.2). Responses of *very safe* and *safe* were combined into one response, *safe*.

Figure 7.2: Perceptions of Safety of Contraceptive Methods Among Women Aged 15-49 Years, by Method (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

For all methods except injections, a greater proportion of women felt the method was unsafe rather than safe. A relatively small percentage of respondents thought any of the methods was safe, but respondents perceived injections to be the safest. Respondents perceived pills as the least safe.

More than one-third of women did not know whether injections, condoms, implants/IUDs, or pills were safe. Not knowing about each method's safety was more common among rural and young women (aged 15-19 years), compared with urban women and women in other age groups (Table 7.2).

A larger proportion of women who had ever used modern contraception felt that each method was safe (pills, 29.8%; injections, 50.4%; condoms, 34.4%; implants/IUDs, 33.2%), compared with women who had never used a modern method (pills, 13.2%; injections, 16.8%; condoms, 15.2%; implants/IUDs, 13.8%). Notably, women who had never used modern contraception tended to report that they did not know about method safety (pills, 45.8%; injections, 45.1%; condoms, 48.5%), compared with ever-users (pills, 21.9%; injections, 10.6%; condoms, 29.4%). Not knowing about the safety of a method was most common for implants/IUDs, as half of contraceptive non-users (50.4%) and a third of ever-users (33.3%) reported not knowing whether the method was safe (Table 7.2, Figure 7.2).

Table 7.2: Perceptions of Safety of Contraceptive Methods, by Method and Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years

| Characteristic | Contraceptive Method (%) | | | | | | | | | | | | Total | Number of Women | | | | |
|-------------------------------|--------------------------|---------------|----------|---------------|-----------|---------------|----------|---------------|--------|---------------|----------|---------------|-------|-----------------|-----------------|---------------|----------|---------------|
| | Pill | | | | Injection | | | | Condom | | | | | | Implants / IUDs | | | |
| | Safe | Somewhat Safe | Not Safe | Does Not Know | Safe | Somewhat Safe | Not Safe | Does Not Know | Safe | Somewhat Safe | Not Safe | Does Not Know | | | Safe | Somewhat Safe | Not Safe | Does Not Know |
| Residence | | | | | | | | | | | | | | | | | | |
| Urban | 20.7 | 15.5 | 34.0 | 29.8 | 30.1 | 14.4 | 28.1 | 27.4 | 27.6 | 15.6 | 23.8 | 32.9 | 23.1 | 12.5 | 28.2 | 36.2 | 100.0 | 808 |
| Rural | 17.2 | 12.9 | 28.6 | 41.2 | 25.5 | 13.2 | 24.1 | 37.2 | 19.1 | 12.7 | 22.7 | 45.5 | 18.4 | 9.7 | 24.1 | 47.8 | 100.0 | 3,108 |
| Age group (yr) | | | | | | | | | | | | | | | | | | |
| 15-19 | 12.7 | 8.2 | 23.4 | 55.6 | 14.9 | 10.3 | 20.0 | 54.6 | 13.6 | 10.7 | 20.2 | 55.5 | 9.8 | 7.9 | 21.3 | 60.9 | 100.0 | 865 |
| 20-24 | 17.6 | 12.8 | 29.1 | 40.5 | 26.7 | 13.5 | 22.4 | 37.4 | 25.7 | 10.7 | 20.9 | 42.8 | 21.6 | 8.7 | 23.8 | 45.9 | 100.0 | 716 |
| 25-29 | 19.0 | 17.2 | 32.1 | 31.6 | 30.0 | 16.2 | 28.1 | 25.6 | 22.8 | 16.8 | 23.8 | 36.5 | 22.5 | 10.6 | 28.1 | 38.9 | 100.0 | 637 |
| 30-34 | 20.7 | 16.9 | 30.1 | 32.3 | 34.8 | 15.1 | 24.3 | 25.8 | 22.5 | 16.9 | 22.0 | 38.7 | 23.7 | 13.1 | 23.7 | 39.6 | 100.0 | 525 |
| 35-39 | 22.7 | 14.8 | 35.9 | 26.6 | 34.1 | 11.6 | 30.2 | 24.1 | 26.9 | 12.8 | 24.7 | 35.6 | 24.9 | 10.7 | 28.4 | 35.9 | 100.0 | 487 |
| 40-44 | 20.5 | 17.3 | 32.9 | 29.3 | 33.3 | 18.3 | 26.2 | 22.2 | 20.8 | 16.6 | 26.7 | 35.9 | 23.9 | 12.9 | 25.6 | 37.4 | 100.0 | 416 |
| 45-49 | 17.9 | 10.9 | 31.9 | 39.2 | 20.0 | 10.7 | 32.0 | 37.3 | 12.8 | 11.2 | 30.7 | 45.2 | 14.5 | 12.4 | 29.3 | 43.7 | 100.0 | 270 |
| Education level | | | | | | | | | | | | | | | | | | |
| No education | 16.0 | 11.0 | 31.4 | 41.6 | 22.8 | 12.1 | 27.3 | 37.8 | 15.1 | 12.1 | 24.7 | 48.1 | 16.0 | 9.2 | 27.6 | 47.2 | 100.0 | 958 |
| Some primary | 16.1 | 11.7 | 29.0 | 43.2 | 23.1 | 11.7 | 25.3 | 39.9 | 19.1 | 11.2 | 22.1 | 47.5 | 15.6 | 8.4 | 24.8 | 51.3 | 100.0 | 627 |
| Completed primary | 19.1 | 14.9 | 29.3 | 36.8 | 29.8 | 14.2 | 23.7 | 32.3 | 22.1 | 13.7 | 23.4 | 40.8 | 22.2 | 11.0 | 24.4 | 42.5 | 100.0 | 1,926 |
| Attended secondary or higher | 20.2 | 15.8 | 28.3 | 35.7 | 24.8 | 15.9 | 23.7 | 35.7 | 30.7 | 17.3 | 17.8 | 34.1 | 19.9 | 12.3 | 21.3 | 46.5 | 100.0 | 405 |
| Wealth tercile | | | | | | | | | | | | | | | | | | |
| Low | 18.1 | 12.3 | 28.1 | 41.5 | 26.2 | 11.5 | 24.4 | 37.8 | 19.0 | 11.9 | 22.9 | 46.2 | 18.7 | 9.0 | 24.6 | 47.7 | 100.0 | 1,235 |
| Middle | 16.5 | 12.8 | 30.0 | 40.7 | 25.2 | 14.2 | 24.8 | 35.8 | 18.8 | 13.8 | 22.3 | 45.1 | 18.3 | 9.7 | 25.5 | 46.4 | 100.0 | 1,277 |
| High | 19.2 | 15.1 | 30.7 | 35.0 | 27.9 | 14.4 | 25.4 | 32.4 | 24.2 | 14.1 | 23.5 | 38.1 | 20.7 | 11.9 | 24.6 | 42.8 | 100.0 | 1,404 |
| Ever use of any modern method | | | | | | | | | | | | | | | | | | |
| No | 13.2 | 10.9 | 30.1 | 45.8 | 16.8 | 11.6 | 26.4 | 45.1 | 15.2 | 11.2 | 25.1 | 48.5 | 13.8 | 9.3 | 26.5 | 50.4 | 100.0 | 2,758 |
| Yes | 29.8 | 19.8 | 28.4 | 21.9 | 50.4 | 17.9 | 21.1 | 10.6 | 34.4 | 18.5 | 17.6 | 29.4 | 33.2 | 12.5 | 21.0 | 33.3 | 100.0 | 1,158 |
| Total | 18.0 | 13.5 | 29.6 | 39.0 | 26.4 | 13.4 | 24.9 | 35.3 | 20.7 | 13.3 | 22.9 | 43.0 | 19.3 | 10.2 | 24.9 | 45.5 | 100.0 | 3,916 |

Abbreviation: IUD: intrauterine device.
Source: 2014 Kigoma Reproductive Health Survey.

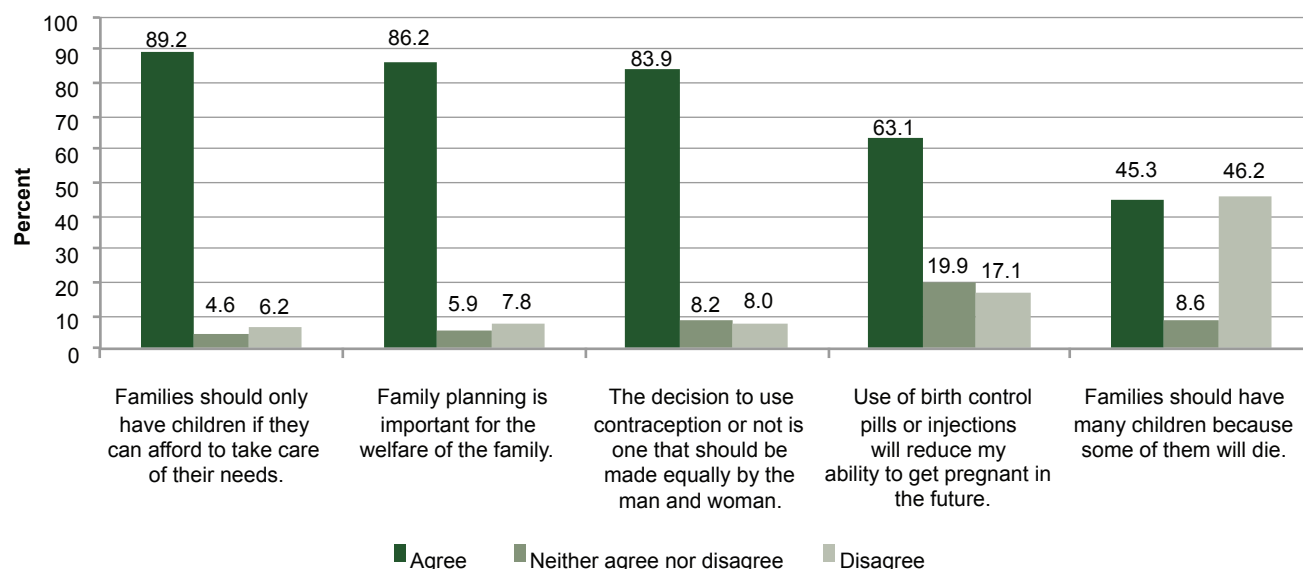
Attitudes Towards Family Planning

All respondents were asked their opinions on a variety of statements pertaining to family planning and contraceptive decision making (Table 7.3, Figure 7.3). Responses of *agree* and *somewhat agree* were combined into one category, *agree*. Responses of *disagree* and *somewhat disagree* were also combined into one category, *disagree*. Despite low contraceptive use among women (Chapter 4) and the reported lack of knowledge of method effectiveness and safety, most women had favorable opinions of statements supporting family planning and contraceptive decision making (Figure 7.3). This was especially true for urban women, women who had attended secondary school or higher, and women who had ever used modern contraception (Table 7.3).

However, only 17% of women were aware that using pills or injections did not reduce the long-term ability to get pregnant, with virtually no difference across women having different characteristics.

Nearly equal proportions of women agreed and disagreed that families should have many children because some of them will die. More rural women (47.1%) than urban women (37.5%) agreed with this idea. Agreement decreased with education level (none, 52.9%; some primary, 52.7%; completed primary, 43.1%), particularly among women who attended secondary school or higher (24.8%).

Figure 7.3: Opinions on Statements Pertaining to Family Planning Among Women Aged 15-49 Years (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

Table 7.3: Opinions on Statements Pertaining to Family Planning, by Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years

| Opinions About Family Planning (%) | | | | | | | | | | | | | | | | | |
|------------------------------------|---|----------------------------|----------|---|----------------------------|----------|--|----------------------------|----------|--|----------------------------|----------|---|----------------------------|----------|-------|-------|
| Characteristic | Family planning is important for the welfare of the family. | | | The decision to use contraception or not is one that should be made equally by the man and woman. | | | Families should only have children if they can afford to take care of their needs, including food, health care, clothing, and schooling. | | | Use of birth control pills or injections will reduce my ability to get pregnant in the future. | | | Families should have many children because some of them will die. | | | | |
| | Agree | Neither Agree nor Disagree | Disagree | Agree | Neither Agree nor Disagree | Disagree | Agree | Neither Agree nor Disagree | Disagree | Agree | Neither Agree nor Disagree | Disagree | Agree | Neither Agree nor Disagree | Disagree | | |
| | Total | Women | | Total | Women | | Total | Women | | Total | Women | | Total | Women | | | |
| Residence | | | | | | | | | | | | | | | | | |
| Urban | 91.6 | 2.9 | 5.5 | 85.9 | 6.1 | 8.1 | 92.5 | 2.5 | 5.0 | 65.1 | 15.7 | 19.2 | 37.5 | 7.1 | 55.4 | 100.0 | 808 |
| Rural | 84.9 | 6.7 | 8.4 | 83.4 | 8.7 | 7.9 | 88.4 | 5.1 | 6.5 | 62.5 | 20.9 | 16.6 | 47.1 | 9.0 | 43.8 | 100.0 | 3,108 |
| Age group | | | | | | | | | | | | | | | | | |
| 15-19 | 82.0 | 9.1 | 9.0 | 74.7 | 15.5 | 9.8 | 88.6 | 6.1 | 5.2 | 57.8 | 27.3 | 15.0 | 45.1 | 11.3 | 43.6 | 100.0 | 865 |
| 20-24 | 88.6 | 4.0 | 7.4 | 87.8 | 5.2 | 7.0 | 90.6 | 3.4 | 6.0 | 63.7 | 18.3 | 17.9 | 45.0 | 6.4 | 48.6 | 100.0 | 716 |
| 25-29 | 88.4 | 4.1 | 7.6 | 87.1 | 5.8 | 7.1 | 90.8 | 3.9 | 5.4 | 66.1 | 17.9 | 16.0 | 44.4 | 8.1 | 47.5 | 100.0 | 637 |
| 30-34 | 86.4 | 5.6 | 7.9 | 84.9 | 6.8 | 8.4 | 88.9 | 4.1 | 7.0 | 61.4 | 18.1 | 20.5 | 45.6 | 8.1 | 46.3 | 100.0 | 525 |
| 35-39 | 89.8 | 3.1 | 7.2 | 84.9 | 7.4 | 7.7 | 88.3 | 3.7 | 8.0 | 64.5 | 15.4 | 20.1 | 49.2 | 6.0 | 44.8 | 100.0 | 487 |
| 40-44 | 86.7 | 6.7 | 6.5 | 88.1 | 4.6 | 7.2 | 86.6 | 6.4 | 7.0 | 68.1 | 17.4 | 14.4 | 41.2 | 10.7 | 48.1 | 100.0 | 416 |
| 45-49 | 82.2 | 9.4 | 8.5 | 88.7 | 5.1 | 6.2 | 88.5 | 3.8 | 7.6 | 67.7 | 16.5 | 15.8 | 46.8 | 9.1 | 44.2 | 100.0 | 270 |
| Education level | | | | | | | | | | | | | | | | | |
| No education | 80.2 | 9.1 | 10.8 | 80.1 | 10.7 | 9.1 | 85.1 | 6.9 | 8.0 | 62.4 | 22.2 | 15.5 | 52.9 | 10.2 | 36.9 | 100.0 | 958 |
| Some primary | 84.0 | 8.1 | 7.9 | 81.1 | 10.7 | 8.3 | 89.9 | 4.7 | 5.3 | 61.0 | 21.0 | 18.0 | 52.7 | 9.7 | 37.6 | 100.0 | 627 |
| Completed primary | 88.9 | 4.2 | 6.9 | 85.6 | 6.6 | 7.9 | 90.2 | 3.8 | 6.1 | 65.3 | 17.6 | 17.0 | 43.1 | 7.9 | 49.0 | 100.0 | 1,926 |
| Attended secondary or higher | 91.9 | 3.1 | 5.1 | 89.9 | 5.5 | 4.7 | 93.4 | 2.4 | 4.1 | 57.6 | 22.9 | 19.5 | 24.8 | 6.5 | 68.7 | 100.0 | 405 |
| Union status | | | | | | | | | | | | | | | | | |
| Currently in union | 87.0 | 5.2 | 7.8 | 87.8 | 5.2 | 7.0 | 88.9 | 4.4 | 6.8 | 65.1 | 17.0 | 17.9 | 46.4 | 7.9 | 45.6 | 100.0 | 2,544 |
| Not currently in union | 84.9 | 7.2 | 7.9 | 77.2 | 13.3 | 9.6 | 89.8 | 4.9 | 5.3 | 59.5 | 24.8 | 15.6 | 43.2 | 9.8 | 47.0 | 100.0 | 1,372 |
| Ever use of any modern method | | | | | | | | | | | | | | | | | |
| No | 82.5 | 7.7 | 9.8 | 81.1 | 10.0 | 8.8 | 88.3 | 5.3 | 6.3 | 63.1 | 22.6 | 14.3 | 47.3 | 9.1 | 43.6 | 100.0 | 2,758 |
| Yes | 95.4 | 1.5 | 3.0 | 90.8 | 3.5 | 5.6 | 91.3 | 2.6 | 6.2 | 63.1 | 12.9 | 23.9 | 40.1 | 7.4 | 52.5 | 100.0 | 1,158 |
| Total | 86.2 | 5.9 | 7.8 | 83.9 | 8.2 | 8.0 | 89.2 | 4.6 | 6.2 | 63.1 | 19.9 | 17.1 | 45.3 | 8.6 | 46.2 | 100.0 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

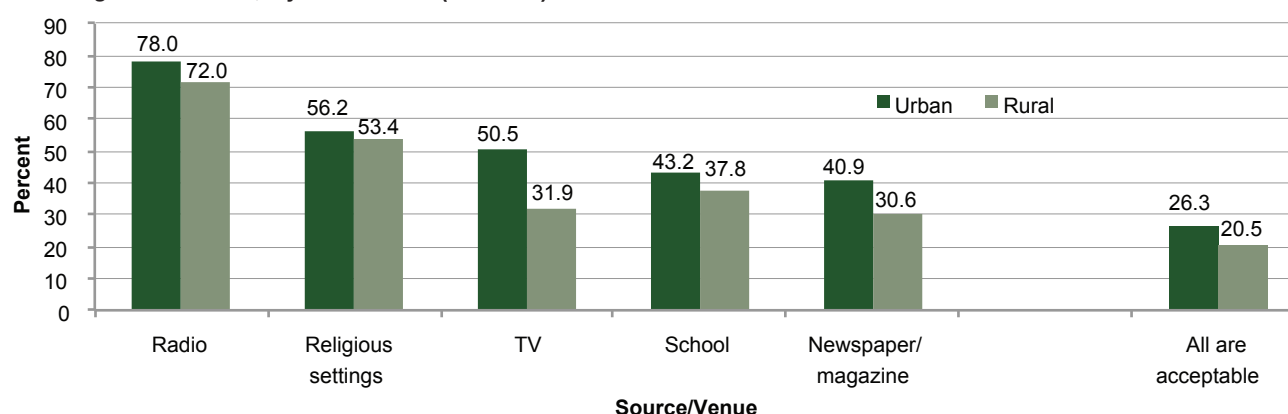
7.2 Family Planning Information

Acceptable Venues for Family Planning Information

All respondents were asked whether they felt the following venues were acceptable for providing information on family planning and contraception: radio, television, newspapers/magazines, school, and religious settings (Table 7.4). About a quarter of urban women (Figure 7.4), women who were not currently in union, and women who had ever used modern contraception felt that all venues were acceptable. Perceptions of each venue as acceptable for family planning information increased with education, especially among women who had attended secondary school or more.

About three-quarters of women (73.2%) felt that the radio was an acceptable venue for family planning information. Interestingly, more than half of women (53.9%) felt that religious settings were acceptable. Fewer than 40% of women felt that other sources were acceptable (school, 38.9%; television, 35.5%; newspapers/magazines, 32.9%).

Figure 7.4: Women Aged 15-49 Years Who Considered Various Sources/Venues Acceptable for Family Planning Information, by Residence (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

Table 7.4: Acceptable Sources or Venues for Provision of Family Planning Information, by Source/Venue and Selected Characteristics (Percent), Women Aged 15-49 Years

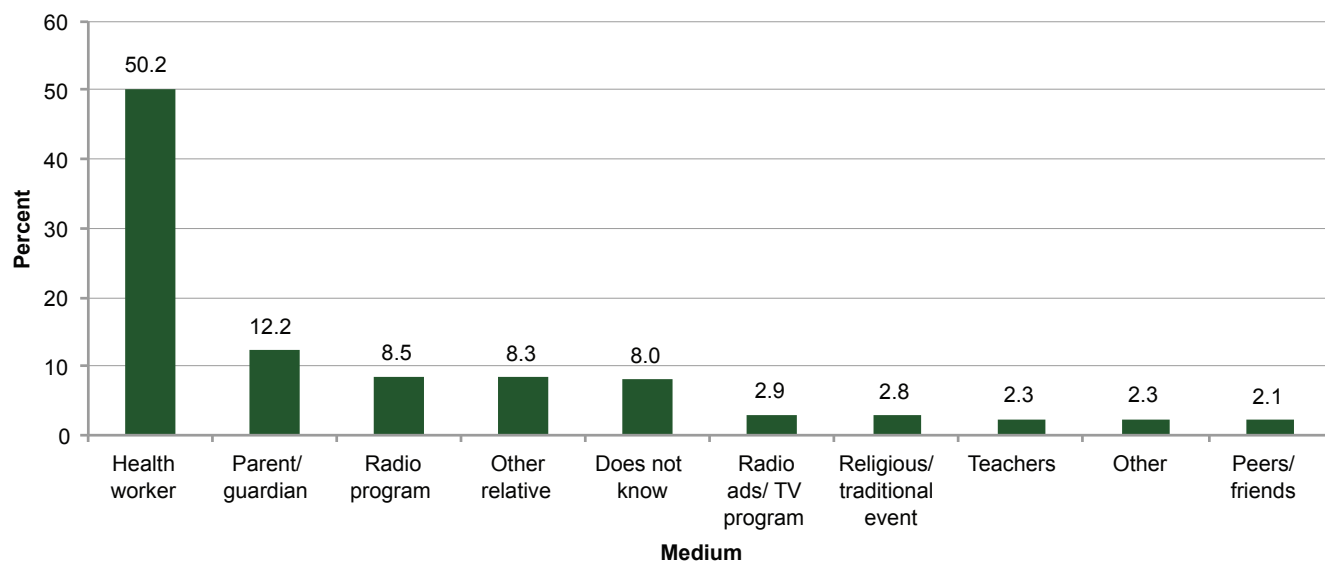
| Characteristic | Source/Venue of Information (%) | | | | | | Number of Women |
|-------------------------------|---------------------------------|------------|-----------------------|--------|--------------------|--------------------|-----------------|
| | Radio | Television | Newspaper or Magazine | School | Religious Settings | All Are Acceptable | |
| Residence | | | | | | | |
| Urban | 78.0 | 50.5 | 40.9 | 43.2 | 56.2 | 26.3 | 808 |
| Rural | 72.0 | 31.9 | 30.6 | 37.8 | 53.4 | 20.5 | 3,108 |
| Education level | | | | | | | |
| No education | 66.9 | 27.5 | 19.5 | 29.1 | 49.9 | 15.3 | 958 |
| Some primary | 69.6 | 30.9 | 27.1 | 36.0 | 49.2 | 18.8 | 627 |
| Completed primary | 75.6 | 35.3 | 35.4 | 38.3 | 54.8 | 21.6 | 1,926 |
| Attended secondary or higher | 83.2 | 63.7 | 60.4 | 70.3 | 67.3 | 41.5 | 405 |
| Union status | | | | | | | |
| Currently in union | 72.6 | 31.2 | 29.2 | 35.5 | 53.5 | 19.5 | 2,544 |
| Not currently in union | 74.3 | 43.2 | 38.6 | 44.8 | 54.7 | 25.3 | 1,372 |
| Ever use of any modern method | | | | | | | |
| No | 70.8 | 33.5 | 30.4 | 38.0 | 51.6 | 20.4 | 2,758 |
| Yes | 79.3 | 40.6 | 38.1 | 41.1 | 59.9 | 24.5 | 1,158 |
| Total | 73.2 | 35.5 | 32.6 | 38.9 | 53.9 | 21.6 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

Preferred Medium for Sex Education

All respondents were asked their preferred medium for sex education (Table 7.5, Figure 7.5). Half of women preferred to obtain such information from health workers, far more than from any other source. This was followed by a preference for parents/guardians, radio programs, and other relatives. No other source was preferred by more than 3% of respondents.

Figure 7.5: Preferred Medium for Sex Education Topics Among Women Aged 15-49 Years (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

More ever-users than never-users of modern contraception preferred to obtain information from a health worker (61.7% vs 45.7%, respectively). While health workers were the preferred source for all women, the second-most preferred source differed according to whether women had or had not ever used modern contraception. Women who had ever used a modern method preferred radio (9.8%; never used, 8.0%), whereas women who had never used a modern method preferred parents/guardians (15.0%; ever used, 5.3%) and other relatives (9.3%; ever used, 5.9%). The preference for parents/guardians decreased sharply with increasing age and increased with education level.

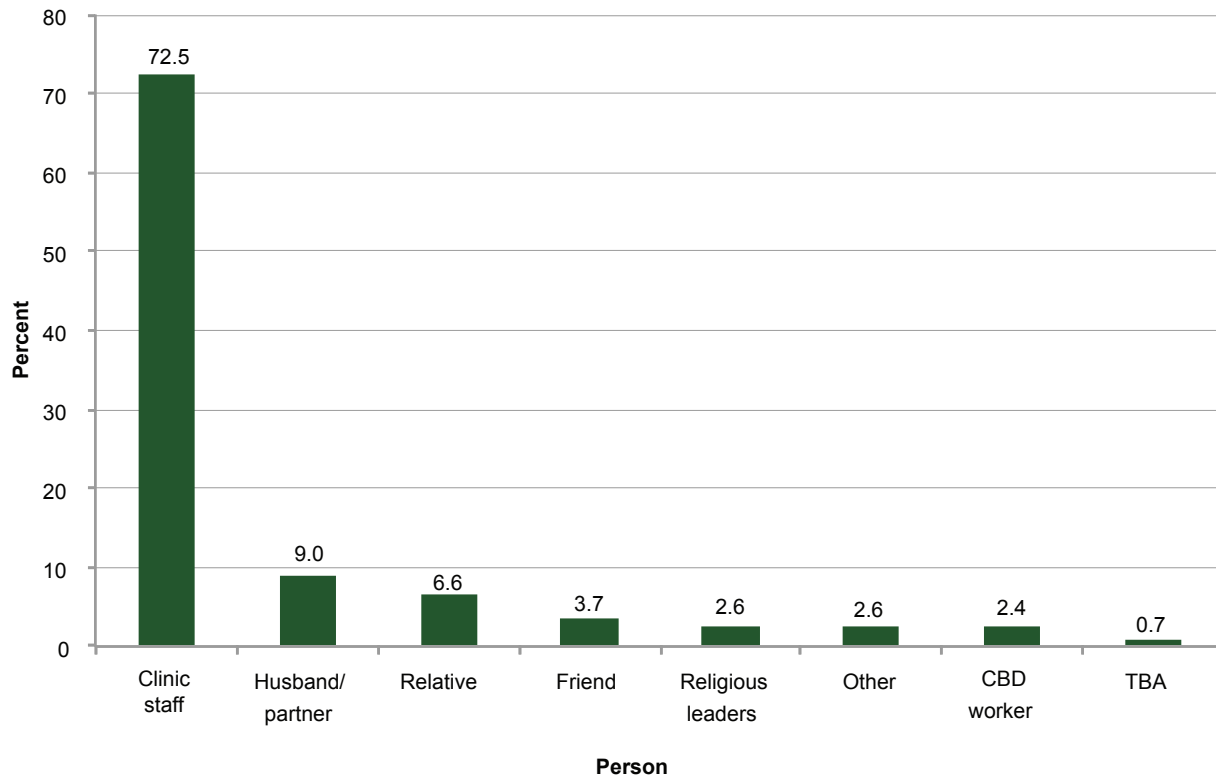
Table 7.5: Preferred Medium for Sex Education Topics, by Source and Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years

| Characteristic | Preferred Medium of Information (%) | | | | | | | | | | Number of Women |
|---|-------------------------------------|-------------------|------------|-------------------|------------------|-----------------------------------|------------------------------------|------------------|--------------------|------------------|-----------------|
| | Parent/ Guardian | Other Relative | Teachers | Peers/ Friends | Radio Program | Other Radio Ads/ TV Program | Religious/ Traditional Event | Health Worker | Other ^a | Does Not Know | Total |
| Residence | | | | | | | | | | | |
| Urban | 12.4 | 3.7 | 2.2 | 2.5 | 11.1 | 7.3 | 1.7 | 47.7 | 2.7 | 8.8 | 100.0 |
| Rural | 12.2 | 9.5 | 2.3 | 2.0 | 7.9 | 2.0 | 3.1 | 50.9 | 2.4 | 7.8 | 100.0 |
| Age group (yr) | | | | | | | | | | | |
| 15-19 | 28.6 | 6.2 | 6.4 | 3.8 | 7.9 | 4.7 | 1.6 | 31.0 | 3.1 | 6.7 | 100.0 |
| 20-24 | 14.7 | 8.5 | 1.3 | 3.1 | 10.1 | 3.3 | 1.5 | 48.7 | 2.4 | 6.3 | 100.0 |
| 25-29 | 5.9 | 8.6 | 0.8 | 1.5 | 8.2 | 2.3 | 2.6 | 59.2 | 3.1 | 7.9 | 100.0 |
| 30-34 | 5.2 | 9.0 | 1.2 | 1.1 | 7.9 | 3.0 | 4.2 | 58.0 | 1.9 | 8.6 | 100.0 |
| 35-39 | 2.7 | 9.2 | 1.3 | 0.7 | 6.7 | 1.4 | 4.6 | 63.0 | 1.6 | 8.7 | 100.0 |
| 40-44 | 3.1 | 10.9 | 0.6 | 0.8 | 10.1 | 1.9 | 4.8 | 58.5 | 1.2 | 8.1 | 100.0 |
| 45-49 | 3.0 | 8.7 | 0.0 | 0.9 | 9.1 | 2.3 | 3.5 | 54.6 | 2.5 | 15.3 | 100.0 |
| Education level | | | | | | | | | | | |
| No education | 9.6 | 11.5 | 1.8 | 1.7 | 5.8 | 1.7 | 4.0 | 52.5 | 1.4 | 10.0 | 100.0 |
| Some primary | 12.7 | 8.5 | 3.5 | 2.4 | 6.5 | 1.9 | 1.9 | 47.7 | 2.0 | 12.8 | 100.0 |
| Completed primary | 12.7 | 7.8 | 1.0 | 2.4 | 9.8 | 2.5 | 2.9 | 52.2 | 2.1 | 6.5 | 100.0 |
| Attended secondary or higher | 15.8 | 2.8 | 7.7 | 1.5 | 12.1 | 10.6 | 1.0 | 39.4 | 6.7 | 2.5 | 100.0 |
| Wealth tercile | | | | | | | | | | | |
| Low | 12.4 | 10.8 | 2.1 | 1.3 | 4.9 | 1.8 | 3.1 | 50.9 | 1.6 | 11.0 | 100.0 |
| Middle | 12.6 | 8.0 | 2.0 | 3.3 | 7.5 | 1.4 | 3.3 | 51.9 | 2.4 | 7.7 | 100.0 |
| High | 11.8 | 6.3 | 2.8 | 1.7 | 12.8 | 5.7 | 2.2 | 48.1 | 3.2 | 5.5 | 100.0 |
| Ever used modern method | | | | | | | | | | | |
| No | 15.0 | 9.3 | 3.0 | 2.3 | 8.0 | 3.2 | 3.0 | 45.7 | 2.4 | 8.1 | 100.0 |
| Yes | 5.3 | 5.9 | 0.4 | 1.7 | 9.8 | 2.4 | 2.5 | 61.7 | 2.5 | 7.8 | 100.0 |
| Total | 12.2 | 8.3 | 2.3 | 2.1 | 8.5 | 2.9 | 2.8 | 50.2 | 2.3 | 8.0 | 100.0 |
| Source: 2014 Kigoma Reproductive Health Survey. | | | | | | | | | | | |
| ^a "Other" includes help line, printed materials, youth information center, youth/summer camp, and other non-predetermined responses. | | | | | | | | | | | |

Preferred Person to Provide Family Planning Information

Table 7.6 and Figure 7.6 show the people to whom women would most want to talk about family planning. A preference for clinic staff outweighed all other sources; nearly three-fourths of women (72.5%) preferred talking with clinic staff members, whereas fewer than 10% of women preferred talking with any other person.

Figure 7.6: Preferred Person to Talk with About Family Planning, Among Women Aged 15-49 Years (Percent Distribution)



Abbreviations: CBD, community-based distribution; TBA, traditional birth attendant.
Source: 2014 Kigoma Reproductive Health Survey.

Women in each geographic location, age group, and education level favored clinic staff. Women's preference for clinic staff increased sharply after age 19 years, peaked among women aged 35-39 years, and decreased in older women (Table 7.6). More women who completed primary education (75.5%) or some secondary schooling or higher (75.0%) preferred to talk with clinic staff, compared with women with no education (71.1%) or some primary schooling (64.7%). The preference for obtaining family planning information from husbands/partners decreased with increasing education.

Table 7.6: Preferred Person to Provide Information on Family Planning, by Person and Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years

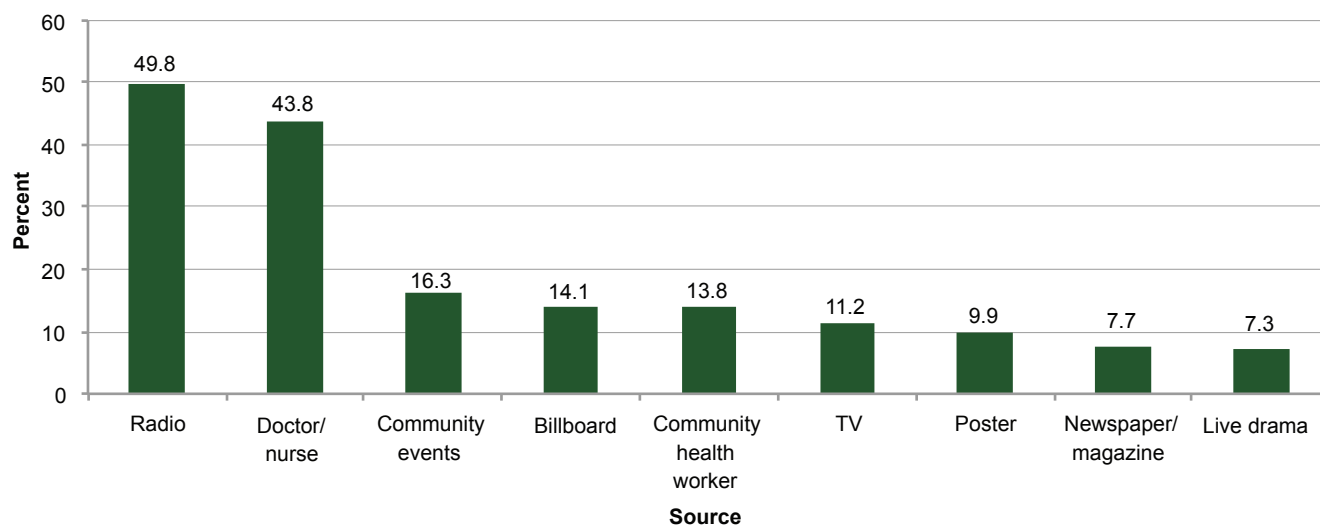
| Characteristic | Preferred Person for Family Planning Information (%) | | | | | | | Number of Women |
|--------------------------------------|--|--------------|-----------------------------|------------------|------------|------------|------------------|-----------------|
| | CBD Worker | Clinic Staff | Traditional Birth Attendant | Husband/ Partner | Friend | Relative | Religious Leader | |
| Residence | | | | | | | | |
| Urban | 3.7 | 75.0 | 0.5 | 6.3 | 3.1 | 7.0 | 2.4 | 808 |
| Rural | 2.0 | 72.0 | 0.7 | 9.6 | 3.8 | 6.5 | 2.7 | 3,108 |
| Age group (yr) | | | | | | | | |
| 15-19 | 2.1 | 57.4 | 0.2 | 6.2 | 8.7 | 17.0 | 3.6 | 865 |
| 20-24 | 1.6 | 73.1 | 0.6 | 11.1 | 3.7 | 6.4 | 1.4 | 716 |
| 25-29 | 2.6 | 80.3 | 0.5 | 11.3 | 1.4 | 1.6 | 1.3 | 637 |
| 30-34 | 2.5 | 78.7 | 0.8 | 10.0 | 2.1 | 2.1 | 2.2 | 525 |
| 35-39 | 2.9 | 82.7 | 1.0 | 6.3 | 1.4 | 2.3 | 2.1 | 487 |
| 40-44 | 1.9 | 76.5 | 1.6 | 9.4 | 1.3 | 3.0 | 4.4 | 416 |
| 45-49 | 4.2 | 72.0 | 0.7 | 9.0 | 1.3 | 2.3 | 6.2 | 270 |
| Education level | | | | | | | | |
| No education | 3.3 | 71.1 | 1.0 | 12.3 | 2.3 | 5.2 | 2.5 | 958 |
| Some primary | 1.7 | 64.7 | 1.0 | 12.2 | 5.2 | 10.0 | 2.6 | 627 |
| Completed primary | 2.3 | 75.5 | 0.5 | 7.2 | 4.0 | 5.4 | 3.0 | 1,926 |
| Attended secondary or higher | 1.6 | 75.0 | 0.0 | 4.3 | 3.1 | 9.9 | 1.4 | 405 |
| Wealth tercile | | | | | | | | |
| Low | 2.3 | 72.6 | 1.1 | 10.5 | 3.0 | 6.1 | 2.8 | 1,235 |
| Middle | 1.6 | 70.5 | 0.6 | 10.0 | 4.5 | 6.6 | 3.2 | 1,277 |
| High | 3.1 | 74.4 | 0.3 | 6.6 | 3.5 | 7.0 | 2.0 | 1,404 |
| Ever use of any modern method | | | | | | | | |
| No | 2.8 | 66.9 | 0.6 | 10.0 | 4.5 | 8.6 | 3.3 | 2,758 |
| Yes | 1.2 | 86.6 | 0.7 | 6.3 | 1.8 | 1.4 | 1.0 | 1,158 |
| Total | 2.4 | 72.5 | 0.7 | 9.0 | 3.7 | 6.6 | 2.6 | 3,916 |

Abbreviation: CBD, community-based distribution.
Source: 2014 Kigoma Reproductive Health Survey.

Exposure to Family Planning Messaging

In addition to understanding women's preferred sources of information on family planning and sex education, it is important to know whether they have heard this information disseminated through certain sources. Table 7.7 and Figure 7.7 show the sources through which respondents had been exposed to family planning messaging in the 6 months preceding the interview.

Figure 7.7: Exposure of Women Aged 15-49 Years to Family Planning Messages During the 6 Months Preceding Survey, by Source (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

The greatest percentages of women were exposed to family planning messages on the radio or from a doctor or nurse. Fewer than one-fifth of women reported having heard or seen such messages via community events, billboards, community health workers, or television. An even smaller percentage reported getting information from posters, newspapers/magazines, or live drama.

A doctor or nurse was the most common source of family planning messages for women currently in union (56.2%; not in union, 22.1%), whereas radio was the most common source for women not currently in union (44.0%; in union, 53.1%). For all sources, more urban women than rural women indicated exposure to family planning messages. Sources with sharp differences based on geographic location included television (urban, 29.3%; rural, 6.8%), posters (urban, 19.8%; rural, 7.4%), billboards (urban, 24.5%; rural, 11.5%), community events (urban, 22.0%; rural, 14.9%), and live drama (urban, 12.6%; rural, 5.9%).

Additionally, for all sources except doctors or nurses, more women with at least some secondary education reported hearing family planning messages, compared with women with lower educational attainment. More women who had ever used modern contraception reported exposure to family planning messages from each source, compared with women who had never used modern contraception.

Table 7.7: Exposure to Family Planning Messages During the 6 Months Preceding Survey, by Source and Selected Characteristics (Percent)
Women Aged 15-49 Years

| Characteristic | Source of Family Planning Messages in Last 6 Months (%) | | | | | | | | | Number of Women |
|---------------------------------|---|------|------------------------|--------|-----------|---------------------|---------------|------------------|----------------------------|-----------------|
| | Radio | TV | Newspaper/ Magazine | Poster | Billboard | Community Events | Live Drama | Doctor/ Nurse | Community Health Worker | |
| Residence | | | | | | | | | | |
| Urban | 57.0 | 29.3 | 11.7 | 19.8 | 24.5 | 22.0 | 12.6 | 48.1 | 17.0 | 808 |
| Rural | 48.1 | 6.8 | 6.7 | 7.4 | 11.5 | 14.9 | 5.9 | 42.8 | 13.0 | 3,108 |
| Education level | | | | | | | | | | |
| No education | 44.5 | 4.8 | 2.6 | 2.2 | 3.5 | 11.5 | 4.8 | 43.9 | 14.6 | 958 |
| Some primary | 44.7 | 7.6 | 4.2 | 6.8 | 9.4 | 14.2 | 3.0 | 39.3 | 10.1 | 627 |
| Completed primary | 53.0 | 10.7 | 8.6 | 10.9 | 17.4 | 17.1 | 7.8 | 46.4 | 14.4 | 1,926 |
| Attended secondary or higher | 55.8 | 35.2 | 20.9 | 28.6 | 31.6 | 27.7 | 17.5 | 38.5 | 15.1 | 405 |
| Union status | | | | | | | | | | |
| Currently in union | 53.1 | 9.8 | 6.3 | 10.1 | 14.2 | 16.7 | 6.1 | 56.2 | 16.7 | 2,544 |
| Not currently in union | 44.0 | 13.7 | 10.0 | 9.5 | 14.0 | 15.7 | 9.3 | 22.1 | 8.7 | 1,372 |
| Wealth tercile | | | | | | | | | | |
| Low | 37.8 | 3.4 | 4.5 | 3.7 | 7.9 | 11.5 | 4.6 | 40.9 | 10.2 | 1,235 |
| Middle | 51.6 | 5.2 | 5.8 | 6.9 | 11.8 | 15.0 | 5.6 | 45.9 | 13.2 | 1,277 |
| High | 59.0 | 24.1 | 12.3 | 18.3 | 21.9 | 21.9 | 11.2 | 44.6 | 17.7 | 1,404 |
| Ever use of any modern method | | | | | | | | | | |
| No | 46.0 | 9.8 | 6.9 | 7.5 | 12.0 | 14.3 | 6.2 | 35.6 | 12.1 | 2,758 |
| Yes | 59.4 | 14.8 | 9.6 | 15.8 | 19.4 | 21.4 | 9.8 | 64.3 | 18.2 | 1,158 |
| Total | 49.8 | 11.2 | 7.7 | 9.9 | 14.1 | 16.3 | 7.3 | 43.8 | 13.8 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

Wazazi Nipendeni Safe Motherhood Text Message Program

Wazazi Nipendeni (*Parents Love Me*) is a national Healthy Pregnancy and Safe Motherhood multimedia campaign in Tanzania. One of the goals of the campaign is to harness mobile phone technology and text messaging to reduce maternal and infant mortality. Tables 7.8 and 7.9 describe women's knowledge of and registration with the Wazazi Nipendeni safe motherhood text message program.

Few women aged 15-49 years (18.4%) indicated that they had heard of the program. Familiarity with the text message program was higher among urban women (24.1%; rural, 17.1%), women who had ever used modern contraception (20.0%; never used, 17.8%), and women in younger age groups (Table 7.8).

Table 7.8: Familiarity with Wazazi Nipendeni Safe Motherhood Text Message Program, by Selected Characteristics (Percent Distribution)
Women Aged 15-49 Years

| Characteristic | Heard of Program (%) | | | Total | Number of Women |
|-------------------------------|----------------------|------|-------------|-------|-----------------|
| | Yes | No | Do Not Know | | |
| Residence | | | | | |
| Urban | 24.1 | 75.7 | 0.2 | 100.0 | 808 |
| Rural | 17.1 | 82.0 | 1.0 | 100.0 | 3,108 |
| Age group (yr) | | | | | |
| 15-19 | 20.1 | 79.0 | 0.9 | 100.0 | 865 |
| 20-24 | 22.9 | 76.5 | 0.6 | 100.0 | 716 |
| 25-29 | 15.5 | 84.1 | 0.3 | 100.0 | 637 |
| 30-34 | 15.6 | 83.2 | 1.2 | 100.0 | 525 |
| 35-39 | 18.6 | 80.4 | 1.0 | 100.0 | 487 |
| 40-44 | 15.0 | 84.3 | 0.8 | 100.0 | 416 |
| 45-49 | 16.0 | 82.6 | 1.4 | 100.0 | 270 |
| Education level | | | | | |
| No education | 12.3 | 86.5 | 1.2 | 100.0 | 958 |
| Some primary | 15.6 | 83.8 | 0.7 | 100.0 | 627 |
| Completed primary | 19.3 | 80.0 | 0.7 | 100.0 | 1,926 |
| Attended secondary or higher | 33.7 | 65.8 | 0.4 | 100.0 | 405 |
| Wealth tercile | | | | | |
| Low | 12.8 | 86.3 | 0.9 | 100.0 | 1,235 |
| Middle | 17.4 | 81.6 | 1.0 | 100.0 | 1,277 |
| High | 24.6 | 74.9 | 0.6 | 100.0 | 1,404 |
| Ever use of any modern method | | | | | |
| No | 17.8 | 81.3 | 0.9 | 100.0 | 2,758 |
| Yes | 20.0 | 79.4 | 0.6 | 100.0 | 1,158 |
| Total | 18.4 | 80.8 | 0.8 | 100.0 | 3,916 |

Source: 2014 Kigoma Reproductive Health Survey.

Of the women who had heard of the program, only 7.2% had registered to receive the text messages (Table 7.9). Registration was higher among urban women (8.2%; rural, 6.8%), women who had ever used modern contraception (12.7%; rural, 4.7%), and women with some secondary education or higher (16.4%; other education levels, < 7%).

Table 7.9: Registration with Wazazi Nipendeni Safe Motherhood Text Message Program, by Selected Characteristics (Percent Distribution)

Women Aged 15-49 Who Are Familiar with the Program

| Characteristic | Registered (%) | | | Number of Women |
|-------------------------------|----------------|------|-------|-----------------|
| | Yes | No | Total | |
| Residence | | | | |
| Urban | 8.2 | 91.8 | 100.0 | 175 |
| Rural | 6.8 | 93.2 | 100.0 | 528 |
| Age group (yr) | | | | |
| 15-19 | 2.6 | 97.4 | 100.0 | 167 |
| 20-24 | 9.1 | 90.9 | 100.0 | 163 |
| 25-29 | 13.5 | 86.5 | 100.0 | 100 |
| 30-34 | 7.5 | 92.5 | 100.0 | 82 |
| 35-39 | 4.3 | 95.7 | 100.0 | 86 |
| 40-44 | 8.6 | 91.4 | 100.0 | 61 |
| 45-49 | 8.2 | 91.8 | 100.0 | 44 |
| Education level | | | | |
| No education | 5.4 | 94.6 | 100.0 | 115 |
| Some primary | 6.4 | 93.6 | 100.0 | 97 |
| Completed primary | 4.6 | 95.4 | 100.0 | 358 |
| Attended secondary or higher | 16.4 | 83.6 | 100.0 | 133 |
| Wealth tercile | | | | |
| Low | 2.8 | 97.2 | 100.0 | 156 |
| Middle | 5.0 | 95.0 | 100.0 | 215 |
| High | 10.7 | 89.3 | 100.0 | 332 |
| Ever use of any modern method | | | | |
| No | 4.7 | 95.3 | 100.0 | 475 |
| Yes | 12.7 | 87.3 | 100.0 | 228 |
| Total | 7.2 | 92.8 | 100.0 | 703 |

Source: 2014 Kigoma Reproductive Health Survey.

CHAPTER 8: EARLY SEXUAL ACTIVITY

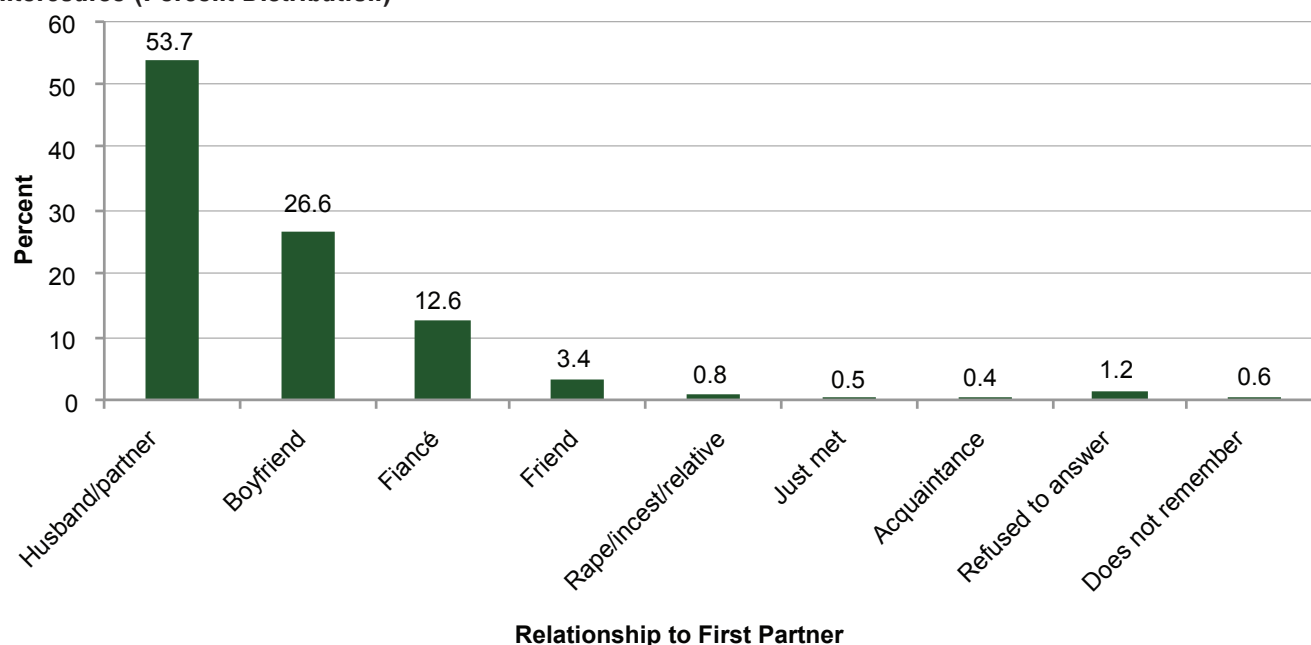
Understanding the early sexual activity of young adult women is critical to planning reproductive health and sex education programs. Women aged 15-24 years constitute 19% of the female population and 10% of the entire population of Kigoma.¹ Women in this age range comprise 44% of the women interviewed in the 2014 Kigoma Reproductive Health Survey; nearly one-quarter (24.1%) of the sampled population is aged 15-19 years, making this the largest age group in the survey (Chapter 2, Table 2.2). Furthermore, findings indicate that early initiation of sexual activity, entry into marriage, and childbearing are common (see Chapter 3, Table 3.3). Nonetheless, a smaller percentage of young women surveyed had ever had sex compared with those in Tanzania overall (15- to 19-year-olds, 45.4%; 20- to 24-year-olds, 90.7%).²

This chapter explores characteristics of young women's first sexual intercourse: relationship to the partner, desire to have sex, contraceptive use, and reasons for not using contraception.

8.1 Relationship to First Partner

Figure 8.1 and Table 8.1 show the respondent's relationship to the first man with whom she had sexual intercourse. Just over half of women reported that their first sexual intercourse occurred with their husband or live-in partner, and more than one-fourth of women first had sex with a boyfriend.

Figure 8.1: Relationship to First Sexual Partner Among Women Aged 15-24 Years Who Ever Had Sexual Intercourse (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

More rural (57.5%) than urban (38.4%) women reported having first had sex with their husband or live-in partner, whereas more urban (43.6%) than rural (22.4%) women reported first sex with a boyfriend. More women with lower education reported first having sexual intercourse with a husband or live-in partner, compared with women having secondary education or more (no education, 65.1%; some primary, 50.1%; completed primary, 58.3%; attended secondary or higher, 23.6%). Half of women who attended secondary school, however, reported a boyfriend as their first partner, far more than among women with less education (no education, 21.4%; some primary, 26.8%; completed primary, 22.1%; attended secondary or higher, 51.0%).

Table 8.1: Relationship to First Sexual Partner, by Selected Characteristics (Percent Distribution)
Women Aged 15-24 Years Who Ever Had Sexual Intercourse

| Relationship to Partner for First Sexual Intercourse (%) | | | | | | | | | | | | |
|--|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------|----------------------|--------------|-------|--------------------|
| Characteristic | Husband/ Live-In Partner | Fiancé | Boyfriend | Friend | Acquaintance | Relative | Just Met | Rape/ Incest | Does Not Remember | Refused | Total | Number of Women |
| Residence | | | | | | | | | | | | |
| Urban | 38.4 | 10.9 | 43.6 | 4.3 | 0.0 | 0.4 | 0.8 | 0.4 | 0.0 | 1.3 | 100.0 | 169 |
| Rural | 57.5 | 13.1 | 22.4 | 3.2 | 0.5 | 0.2 | 0.5 | 0.6 | 0.8 | 1.2 | 100.0 | 687 |
| Age at first sex | | | | | | | | | | | | |
| < 15 | 35.7 | 15.9 | 34.6 | 3.5 | 2.8 | 2.5 | 0.0 | 3.5 | 0.0 | 1.5 | 100.0 | 89 |
| 15-17 | 50.9 | 12.4 | 30.4 | 4.1 | 0.3 | 0.0 | 0.4 | 0.3 | 0.3 | 0.9 | 100.0 | 418 |
| 18-19 | 63.5 | 10.5 | 21.1 | 2.9 | 0.0 | 0.0 | 1.2 | 0.0 | 0.5 | 0.2 | 100.0 | 246 |
| ≥ 20 | 63.2 | 13.6 | 18.0 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 2.5 | 100.0 | 91 |
| Don't know/refused | ^a | ^a | ^a | ^a | ^a | ^a | ^a | ^a | ^a | ^a | 100.0 | 12 |
| Education level | | | | | | | | | | | | |
| No education | 65.1 | 10.1 | 21.4 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 100.0 | 176 |
| Some primary | 50.1 | 12.0 | 26.8 | 3.0 | 0.9 | 1.4 | 2.0 | 2.0 | 0.0 | 1.6 | 100.0 | 149 |
| Completed primary | 58.3 | 12.5 | 22.1 | 3.8 | 0.3 | 0.0 | 0.3 | 0.2 | 1.2 | 1.3 | 100.0 | 409 |
| Attended secondary or higher | 23.6 | 18.0 | 51.0 | 4.3 | 1.0 | 0.0 | 0.0 | 0.8 | 0.5 | 0.9 | 100.0 | 122 |
| Wealth tercile | | | | | | | | | | | | |
| Low | 61.8 | 11.4 | 21.0 | 2.8 | 0.0 | 0.2 | 1.0 | 0.7 | 0.4 | 0.8 | 100.0 | 314 |
| Middle | 60.7 | 13.8 | 18.9 | 2.6 | 0.0 | 0.6 | 0.0 | 0.6 | 0.5 | 2.2 | 100.0 | 266 |
| High | 37.0 | 13.0 | 41.0 | 5.0 | 1.4 | 0.0 | 0.5 | 0.3 | 1.1 | 0.7 | 100.0 | 276 |
| Total | 53.7 | 12.6 | 26.6 | 3.4 | 0.4 | 0.3 | 0.5 | 0.5 | 0.6 | 1.2 | 100.0 | 856 |

Source: 2014 Kigoma Reproductive Health Survey.
Fewer than 25 cases

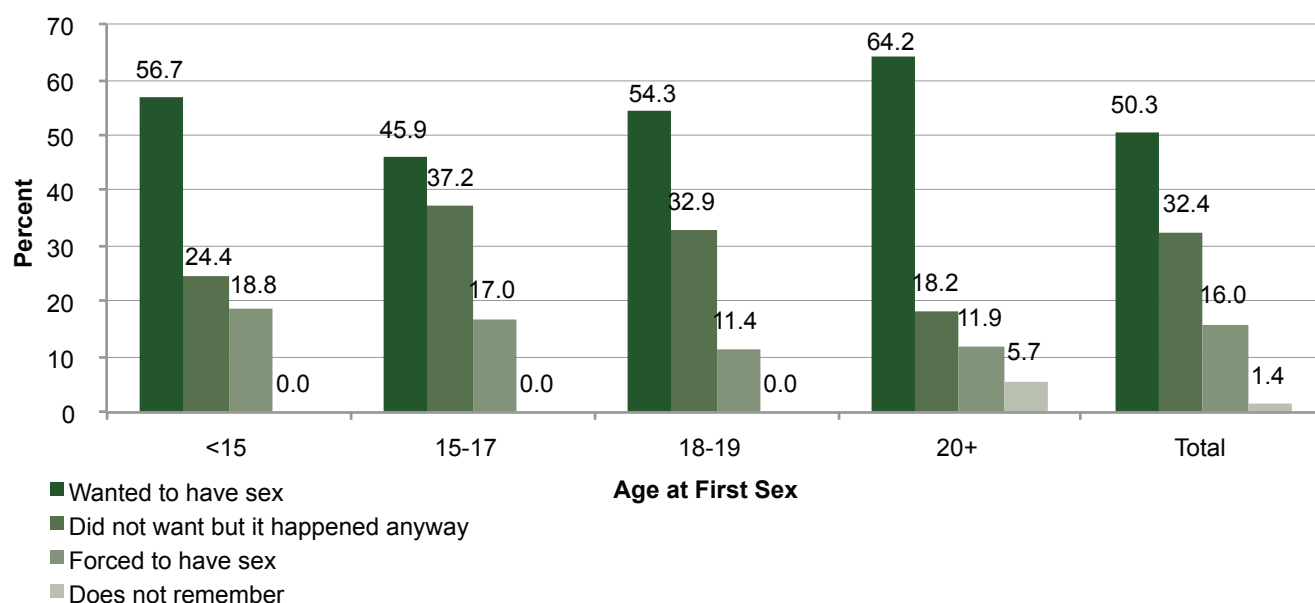
Source: 2014 Kigoma Reproductive Health Survey.
^a Fewer than 25 cases.

8.2 Wantedness of First Sex

For women who were not in union at the time of their first sexual intercourse, Figure 8.2 and Table 8.2 show their desire to have sex at that time. Only half of those women indicated that they wanted to have sex the first time it occurred. One-third reported that they did not want it to happen but that it happened anyway; one-sixth said they were forced to have sex at that time.

Furthermore, wantedness of first sex varied by age at that time (Figure 8.2). A greater percentage of women who were aged 20 years or older wanted to have sex the first time they had sexual intercourse, compared with younger women. A larger percentage of those younger than 18 years of age said that they were forced to have sex, compared with women who were 18 years or older the first time they had sex.

Figure 8.2: Wantedness of Sex at the Time of First Sexual Intercourse, by Age at First Sex, Among Women Aged 15–24 Years Who Ever Had Sexual Intercourse and Were Not in Union at that Time^a (Percent)



Source: 2014 Kigoma Reproductive Health Survey.

^a Four cases of rape/incest were not asked about wantedness, so were removed from analysis.

Table 8.2: Wantedness of Sex at Time of First Sexual Intercourse, by Selected Characteristics (Percent Distribution)

Women Aged 15-24 Years Who Have Ever Had Sexual Intercourse and Were Not in Union at First Sex^a

| Characteristic | Wantedness of First Sex (%) | | | | | Number of Women |
|------------------------------|-----------------------------|-------------------------------------|--------------------|-------------------|-------|-----------------|
| | Wanted to Have Sex | Did Not Want but It Happened Anyway | Forced to Have Sex | Does Not Remember | Total | |
| Residence | | | | | | |
| Urban | 48.4 | 38.5 | 12.1 | 0.9 | 100.0 | 105 |
| Rural | 50.9 | 30.2 | 17.4 | 1.5 | 100.0 | 291 |
| Age at first sex | | | | | | |
| <15 | 56.7 | 24.4 | 18.8 | 0.0 | 100.0 | 55 |
| 15-17 | 45.9 | 37.2 | 17.0 | 0.0 | 100.0 | 201 |
| 18-19 | 54.3 | 32.9 | 11.4 | 0.0 | 100.0 | 94 |
| 20+ | 64.2 | 18.2 | 11.9 | 5.7 | 100.0 | 37 |
| Don't know/refused | b | b | b | b | b | 9 |
| Education level | | | | | | |
| No education | 53.4 | 32.9 | 13.7 | 0.0 | 100.0 | 60 |
| Some primary | 47.7 | 21.8 | 30.5 | 0.0 | 100.0 | 71 |
| Completed primary | 47.8 | 38.2 | 11.8 | 2.1 | 100.0 | 170 |
| Attended secondary or higher | 55.1 | 29.9 | 12.9 | 2.2 | 100.0 | 95 |
| Wealth tercile | | | | | | |
| Low | 52.0 | 34.4 | 13.6 | 0.0 | 100.0 | 118 |
| Middle | 48.7 | 29.1 | 20.0 | 2.2 | 100.0 | 103 |
| High | 50.0 | 33.0 | 15.1 | 1.9 | 100.0 | 175 |
| Total | 50.3 | 32.4 | 16.0 | 1.4 | 100.0 | 396 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Four cases of rape/incest removed from analysis.

^b Fewer than 25 cases.

8.3 Contraceptive Use at First Sex

Women were asked whether they used contraception the first time they had sexual intercourse. All women who were in union with a husband or live-in partner at first sex reported that they did not use contraception the first time they had sex (data not shown). Table 8.3 shows use of contraception at first sexual intercourse among 15- to 24-year-old women who were not in union at the time of their first sex.

Similar to women who were in union at first sex, an overwhelming majority of women not in union did not use contraception the first time they had sex (89.5%). Only 9.2% of such women did use any method (urban, 12.2%; rural, 8.1%). Use of contraception at first sex increased with education, particularly among women who had attended secondary school (no education, 0.0%; some primary, 5.2%; completed primary, 10.1%; attended secondary or higher, 17.7%). Use of contraception at first sex also increased with age at first sex (< 15, 4.9%; 15-17, 9.2%; 18-19, 10.9%; ≥ 20, 14.7%).

Regardless of their union status, all women aged 15-24 years who reported not using contraception at first sexual intercourse were asked the main reason why they did not use contraception at that time (Table 8.4). Nearly three-fourths (71.1%) of women in union at that time indicated that they did not use contraception because they wanted to become pregnant (Figure 8.3). Among women who were not in union at the time of their first sexual intercourse, the main reasons were that they were unaware of contraception (28.6%) or that sex was not expected (25.0%) (Figure 8.3).

Table 8.3: Use of Contraception by Respondent or Partner at First Sexual Intercourse, by Selected Characteristics (Percent Distribution)

Women Aged 15-24 Years Who Ever Had Sexual Intercourse and Were Not in Union at First Sex^a

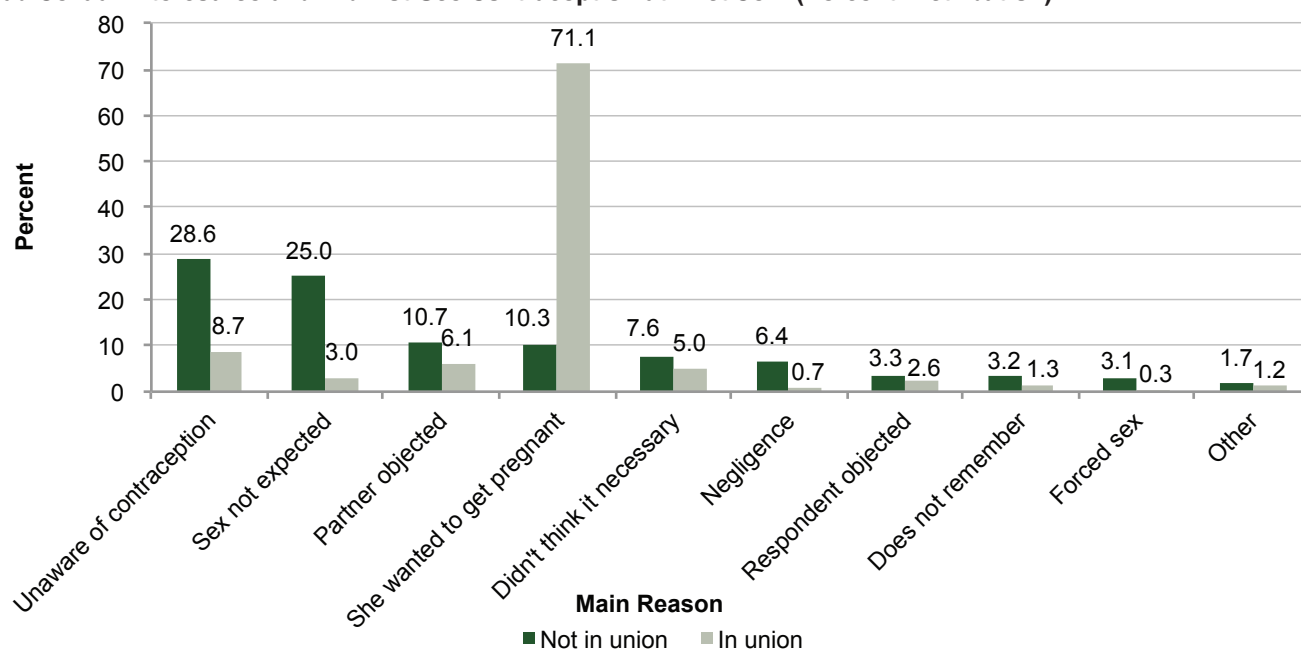
| Characteristic | Used Contraception at First Sexual Intercourse (%) | | | | | Number of Women |
|------------------------------|--|------|-------------------|---------|-------|-----------------|
| | Yes | No | Does Not Remember | Refused | Total | |
| Residence | | | | | | |
| Urban | 12.2 | 86.8 | 0.0 | 0.9 | 100.0 | 105 |
| Rural | 8.1 | 90.5 | 0.3 | 1.0 | 100.0 | 291 |
| Age at first sex | | | | | | |
| <15 | 4.9 | 93.5 | 0.0 | 1.6 | 100.0 | 55 |
| 15-17 | 9.2 | 90.8 | 0.0 | 0.0 | 100.0 | 201 |
| 18-19 | 10.9 | 87.6 | 0.0 | 1.4 | 100.0 | 94 |
| 20+ | 14.7 | 79.6 | 0.0 | 5.7 | 100.0 | 37 |
| Don't know/refused | b | b | b | b | 100.0 | 9 |
| Education level | | | | | | |
| No education | 0.0 | 98.6 | 0.0 | 1.4 | 100.0 | 60 |
| Some primary | 5.2 | 94.8 | 0.0 | 0.0 | 100.0 | 71 |
| Completed primary | 10.1 | 88.5 | 0.6 | 0.8 | 100.0 | 170 |
| Attended secondary or higher | 17.7 | 80.1 | 0.0 | 2.2 | 100.0 | 95 |
| Wealth tercile | | | | | | |
| Low | 9.3 | 90.0 | 0.0 | 0.7 | 100.0 | 118 |
| Middle | 4.0 | 93.8 | 1.0 | 1.2 | 100.0 | 103 |
| High | 12.3 | 86.6 | 0.0 | 1.1 | 100.0 | 175 |
| Total | 9.2 | 89.5 | 0.3 | 1.0 | 100.0 | 396 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Four cases of rape/incest removed from analysis.

^b Fewer than 25 cases.

Figure 8.3: Main Reason for Not Using Contraception at First Sex, Among Women Aged 15-24 Years Who Ever Had Sexual Intercourse and Did Not Use Contraception at First Sex^a (Percent Distribution)



Source: 2014 Kigoma Reproductive Health Survey.

^a Four cases of rape/incest removed from analysis.

Table 8.4: Main Reason for Not Using Contraception at First Sexual Intercourse, by Selected Characteristics (Percent Distribution)
Women Aged 15-24 Years Who Ever Had Sexual Intercourse and Did Not Use Contraception at First Sex^a

| Characteristic | Main Reason for Not Using Contraception During First Sexual Intercourse (%) | | | | | | | | | | Number of Women | |
|------------------------------|---|----------------------------------|--------------------------------|------------------|---------------------|-------------------------------|------------|------------|--------------------|------------------------|-----------------|-------|
| | Sex Was Not Expected | Did Not Know About Contraception | Did Not Think It Was Necessary | Partner Objected | Respondent Objected | She Wanted to Become Pregnant | Negligence | Forced Sex | Other ^b | Does Not Know/Remember | | Total |
| Residence | | | | | | | | | | | | |
| Urban | 13.8 | 21.3 | 12.9 | 8.2 | 5.0 | 32.5 | 2.6 | 0.0 | 2.5 | 1.1 | 100.0 | 154 |
| Rural | 12.2 | 16.4 | 4.5 | 8.1 | 2.4 | 47.7 | 3.4 | 1.9 | 1.2 | 2.4 | 100.0 | 657 |
| Age at first sex | | | | | | | | | | | | |
| <15 | 14.5 | 26.7 | 5.3 | 12.4 | 5.9 | 24.9 | 1.3 | 4.6 | 2.8 | 1.6 | 100.0 | 83 |
| 15-17 | 14.4 | 19.9 | 6.4 | 7.1 | 3.6 | 40.7 | 3.4 | 1.6 | 1.3 | 1.7 | 100.0 | 399 |
| 18-19 | 10.3 | 10.6 | 6.1 | 9.5 | 1.4 | 53.5 | 3.2 | 0.8 | 1.8 | 2.7 | 100.0 | 234 |
| 20+ | 5.5 | 11.9 | 6.3 | 6.0 | 1.2 | 62.7 | 3.0 | 0.0 | 0.0 | 3.4 | 100.0 | 84 |
| Don't know/refused | c | c | c | c | c | c | c | c | c | c | 100.0 | 11 |
| In union at that time | | | | | | | | | | | | |
| No | 25.0 | 28.6 | 7.6 | 10.7 | 3.3 | 10.3 | 6.4 | 3.1 | 1.7 | 3.2 | 100.0 | 355 |
| Yes | 3.0 | 8.7 | 5.0 | 6.1 | 2.6 | 71.1 | 0.7 | 0.3 | 1.2 | 1.3 | 100.0 | 456 |
| Education level | | | | | | | | | | | | |
| No education | 10.7 | 13.9 | 4.8 | 5.7 | 4.4 | 53.9 | 2.2 | 1.0 | 0.0 | 3.4 | 100.0 | 175 |
| Some primary | 11.1 | 22.5 | 3.9 | 9.1 | 1.2 | 38.4 | 2.4 | 4.8 | 1.5 | 5.0 | 100.0 | 144 |
| Completed primary | 12.5 | 15.1 | 7.1 | 8.0 | 3.3 | 47.9 | 2.6 | 0.6 | 2.2 | 0.6 | 100.0 | 389 |
| Attended secondary or higher | 18.2 | 24.2 | 8.2 | 11.5 | 1.1 | 25.1 | 8.9 | 0.6 | 0.9 | 1.2 | 100.0 | 103 |
| Wealth tercile | | | | | | | | | | | | |
| Low | 10.3 | 15.0 | 4.2 | 7.3 | 2.0 | 52.3 | 3.1 | 1.2 | 1.4 | 3.1 | 100.0 | 301 |
| Middle | 13.3 | 14.8 | 5.5 | 7.3 | 3.3 | 47.8 | 2.3 | 1.1 | 1.5 | 3.0 | 100.0 | 258 |
| High | 14.5 | 22.8 | 9.1 | 9.9 | 3.7 | 32.3 | 4.3 | 2.2 | 1.3 | 0.0 | 100.0 | 252 |
| Total | 12.5 | 17.3 | 6.1 | 8.1 | 2.9 | 44.8 | 3.2 | 1.5 | 1.4 | 2.1 | 100.0 | 811 |

Source: 2014 Kigoma Reproductive Health Survey.

^a Four cases of rape/incest removed from analysis.

^b Includes "did not know where to get contraceptives," "could not get a method/not available," "other."

^c Fewer than 25 cases.

References

1. The United Republic of Tanzania National Bureau of Statistics (NBS), Office of Chief Government Statistician. *Population Distribution by Age and Sex*. Dar es Salaam, Zanzibar, Tanzania: NBS, Office of Chief Government Statistician; 2013.
2. NBS, ORC Macro. *Tanzania Demographic and Health Survey 2010*. Dar es Salaam, Tanzania: NBS, ORC Macro; 2011.

CHAPTER 9: SUMMARY OF FINDINGS AND IMPLICATIONS

9.1 Reproductive Health

Pregnancy Health

- Use of several key antenatal, delivery, and postnatal services in Kigoma Region continues to lag behind that of Tanzania as a whole. Continued investment in Kigoma is warranted to achieve Tanzania's reproductive health targets and for the benefit of women and children there.
- Although prenatal care coverage is near universal, first-trimester prenatal care attendance is low (17%). Completion of four or more visits is also low (42%) among women in Kigoma Region. Fewer than half of all women reported receiving education on pregnancy complications and having their blood pressure checked during antenatal care (ANC). Community mobilization to encourage first trimester ANC attendance is needed. At each ANC visit, providers should focus on reviewing pregnancy complications, ensuring blood pressure measurements are taken, and advising women to return for additional visits.
- Distance to services is a barrier for many women. Although many women reportedly planned for transportation to a facility prior to their delivery, nearly half of women reported cost barriers associated with transport, especially in rural areas. Transport voucher programs and community transport funds could assist in offsetting the cost and improving access to health facilities.

Labor, Delivery, and Postpartum Care and Counseling

- Half of births occurred at home. Older women with less education and lower socioeconomic status tended to deliver at home, a decision that women often reported having made themselves. Since nearly all women access antenatal care at some point during pregnancy, ANC visits may provide opportunities to encourage women to deliver in facilities with skilled birth attendants.
- More births occurred in Kigoma dispensaries (17%) than in hospitals (14%) or health centers (13%). Given that 84% of births received ANC at dispensaries, maternal health intervention planners are encouraged to focus more resources on these lowest-level facilities.
- Women reported very low levels of postnatal attendance for their own health (13%). Improved mobilization and renewed focus on the importance of postnatal care are needed.
- All women should receive family planning counseling before, during, and after delivery. In Kigoma Region, only three-quarters of women received family planning counseling during pregnancy, and only 2% received counseling at the time of delivery. The absence of such counseling at the time of delivery is an important missed opportunity.
- Of women who received postnatal family planning counseling, 69% received it at dispensaries. Improved counseling and service provision should be introduced in dispensaries.

Child Health and Mortality

- Eighty-six percent of recently born babies received a well-baby (postnatal) check within 2 months of birth. This postnatal contact with the health system represents an opportunity to provide additional maternal health and family planning services.
- Vital registration is low in Kigoma Region and, as part of improving this system, a better understanding of the barriers to universal birth registration is needed. For example, only 10% of births in facilities reported having a birth certificate. Understanding the barriers to facility-based vital registration is needed to improve capturing of births.

- Child mortality rates have fallen, but Kigoma's population structure and fertility rates indicate that it has not yet proceeded through a demographic transition. Evidence generated by the 2014 Kigoma Reproductive Health Survey indicates that a key strategy to help Kigoma take advantage of the socioeconomic benefits of a demographic dividend would be to reduce fertility through improved knowledge and use of modern contraceptive methods.

9.2 Fertility Levels and Unmet Need for Family Planning Services

- In general, women in Kigoma Region have very high actual and desired fertility, with no real evidence of wanting to reduce fertility significantly. Any efforts to lower fertility levels at the population level would need to first address the reasons women continue to desire large families.
- In spite of wanting large families, there is evidence that women prefer long intervals between births; more than half of women in union would prefer to wait at least 2 years for their next child.
- Overall, 39% of women in union had an unmet need for family planning—most of this need (32%) was for spacing births, and only 7% for limiting births. Rural women and women with low levels of education had the highest levels of unmet need, which suggests that efforts to increase awareness of and meet the demand for family planning should be particularly focused on those two groups.

9.3 Family Planning

Contraceptive Knowledge

- While Kigoma fertility rates are higher than those of Tanzania as a whole, familiarity with and use of modern contraceptive methods are lower in Kigoma. Most women have heard of the pill, injectables, condoms, and implants. Fewer women have ever heard of intrauterine devices (IUD) and tubal ligation. Raising the awareness of these long-acting methods could contribute to increased levels of use.
- About half of women do not know whether condoms, pills, injectables, and implants/IUDs are effective for preventing pregnancy or if they are likely to have health consequences. Basic sex education should be prioritized, including family planning and contraceptive methods. Such education should focus on rural women and women aged 15-19 years.

Use of Contraception

- Most Kigoma women have favorable opinions of statements supporting family planning and contraceptive decision making. Despite this, only 29% of all women surveyed had ever used a modern contraceptive method, and only 16% of women in union were currently using a modern contraceptive method.
- Current use of modern contraception was higher in urban areas than in rural areas. This suggests the need to improve rural women's access to and knowledge of family planning information, methods, and services.
- The injectable is the most popular method among women currently using contraception (7%). Since women using the injectable must return periodically for supplies, such visits could be used to educate women about long-acting methods. Use of the implant, IUD, and tubal ligation does require, of course, staff who are trained and qualified to carry out the procedures, so additional staff training might be required to increase or meet demand.
- Half of women using modern contraception obtained their supplies from dispensaries, which are the most common source for users of injectables, implants, and pills. Thus, dispensary-level informational interventions should be considered.

- Few women in Kigoma Region used contraception to delay their first pregnancy; among all women who had ever used contraception, fewer than one-tenth did so before giving birth to their first child.
- The largest group of contraceptive users initiated use after the birth of their first child (32%), and the second largest after their second child (20%), which suggests that contraceptives are mostly regarded as useful for spacing births.

Non-Use of Contraception

- Among women not currently using contraception, the main reasons for non-use were a desire to become pregnant and a fear of side effects. In fact, nearly two-thirds of all women felt using birth control pills or injectables would reduce their ability to get pregnant in the future, suggesting that better education is needed about methods and their actual side effects.
- Furthermore, almost all young, sexually active women (aged 15-24 years) did not use contraception the first time they had sexual intercourse. About 45% of these women did not use contraception because they wanted to become pregnant, and 17% did not know about contraception at the time. Increased education about sex and contraception for young women should be prioritized.

Contraceptive Preferences and Future Use

- Most women who used contraception were satisfied with their current method. Among the 13% who would like to switch methods, one-quarter would prefer injectables and one-quarter would prefer implants.
- Among the 38% of fecund current non-users who thought they might use a contraceptive method in the future, nearly half (47%) thought they would use the injectable. However, there was also interest in the implant (13%), the pill (11%), and tubal ligation (5%). Education programs about these methods and training of qualified staff could result in greater use.

Opportunities to Educate About Maternal Health and Family Planning Services

- There is demand for family planning information at health facilities. Half of women would prefer to obtain information on family life and sex education from health workers. Additionally, nearly two-thirds of women reported that clinic health workers were their preferred source of information about family planning. Health facility visits provide an opportunity for trained health workers to educate women about maternal health services.
- More than half of women reported listening to the radio at least once a week. Considering that most women felt radio was an acceptable venue for family planning information and that more than half of women had heard such messages on the radio, radio seems to be a viable media channel for maternal health information dissemination.
- Most women stated that religious settings were acceptable venues for disseminating information about family planning. More than four-fifths of women attend religious services at least once a week. Religious leaders could be approached about allowing informational material about maternal health services in religious settings.

ABBREVIATIONS

| | |
|-----------|--|
| ACO | Assistant clinical officer |
| AMO | Assistant medical officer |
| ANC | Antenatal care |
| ASFR | Age-specific fertility rates |
| BOM | Billings Ovulation Method |
| CBD | Community-based distribution |
| CDC | Centers for Disease Control and Prevention |
| CHW | Community health worker |
| CI | Confidence interval |
| C-section | Cesarean section |
| DHS | Demographic and Health Survey |
| EA | Enumeration area |
| GFR | General fertility rate |
| IPTp-SP | Intermittent prophylactic treatment with sulfadoxine-pyrimethamine |
| IUD | Intrauterine device |
| LAM | Lactational amenorrhea |
| MCH | Maternal and child health |
| MoHSW | Ministry of Health and Social Welfare |
| RHS | Reproductive Health Survey |
| TBA | Traditional birth attendant |
| TFR | Total fertility rate |
| TZS | Tanzanian shillings |
| UNICEF | United Nations Children's Fund |
| VCT | Voluntary counseling and treatment |
| WHO | World Health Organization |
| WRA | Women of reproductive age |

APPENDICES

Appendix A: Household Questionnaire

Appendix B: Individual Questionnaire

Appendix A: Household Questionnaire

Note: Field version of questionnaire was translated in Swahili

**2014 REPRODUCTIVE HEALTH SURVEY, KIGOMA REGION
HOUSEHOLD QUESTIONNAIRE**

CONFIDENTIAL

| IDENTIFICATION | | | | |
|---|---|---|---|---|
| DISTRICT _____ WARD ENUMERATION AREA NAME OF HOUSEHOLD HEAD _____ HOUSEHOLD NUMBER | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> | | | |
| INTERVIEWER VISITS | | | | |
| | 1 | 2 | 3 | FINAL VISIT |
| DATE | _____ | _____ | _____ | DAY <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> MONTH <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> YEAR <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">2</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">0</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">1</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">4</div> </div> |
| INTERVIEWER'S NAME | _____ | _____ | _____ | INTERVIEWER ID <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| INTERVIEWER ID | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | INTERVIEWER ID <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| RESULT* | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | RESULT <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| NEXT VISIT: DATE | _____ | _____ | | TOTAL NUMBER OF VISITS <div style="border: 1px solid black; width: 20px; height: 20px;"></div> |
| TIME | _____ | _____ | | |
| *RESULT CODES: 1 COMPLETED 2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 4 POSTPONED 5 REFUSED 6 DWELLING VACANT OR ADDRESS NOT A DWELLING 7 DWELLING DESTROYED 8 DWELLING NOT FOUND 9 OTHER _____ (SPECIFY) | | | | TOTAL PERSONS IN HOUSEHOLD <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> TOTAL ELIGIBLE WOMEN 15-49 <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |

| | | |
|--|--|---|
| SUPERVISOR NAME _____ <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | OFFICE EDITOR <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> | KEYED BY <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> |
|--|--|---|

INTRODUCTION AND CONSENT

Hello. My name is _____, I am working with the Ministry of Health and Social Welfare. We are conducting a survey about health in Kigoma. The information we collect will help the government to plan health services. Your household was selected for the survey. The household survey usually takes about 10 minutes, and then we may do a longer interview of women in the household. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED ... 1 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ... 2 → END

HOUSEHOLD SCHEDULE

| LINE NO. | USUAL RESIDENTS AND VISITORS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE | | AGE | ELIGIBILITY |
|----------|--|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | <p>Please give me the names of the persons who usually live in your household, starting with the head of the household.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP, SEX, RESIDENCE, AGE, AND ELIGIBILITY FOR EACH PERSON, ASK QUESTIONS 2A-2B ON THE LAST PAGE OF THE SCHEDULE TO BE SURE THAT THE LISTING IS COMPLETE.</p> | <p>What is the relationship of (NAME) to the head of the household?</p> <p>SEE CODES BELOW.</p> | <p>Is (NAME) male or female?</p> | <p>Does (NAME) usually live here?</p> | <p>Did (NAME) stay here last night?</p> | <p>How old is (NAME)?</p> <p>IF 95 OR MORE, RECORD '95'.</p> | <p>CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49</p> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 01 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> M F </div> <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> Y N </div> <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> Y N </div> <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <p>IN YEARS</p> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 01 |
| 02 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 02 |
| 03 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 03 |
| 04 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 04 |
| 05 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 05 |
| 06 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 06 |
| 07 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 07 |
| 08 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 08 |
| 09 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 09 |
| 10 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="display: flex; justify-content: space-between;"> 1 2 </div> | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 10 |

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

| | |
|----------------------|------------------------|
| 01 = HEAD | 08 = BROTHER OR SISTER |
| 02 = WIFE OR HUSBAND | 09 = OTHER RELATIVE |
| 03 = SON OR DAUGHTER | 10 = ADOPTED/FOSTER/ |
| 04 = SON-IN-LAW OR | STEPCHILD |
| DAUGHTER-IN-LAW | 11 = NOT RELATED |
| 05 = GRANDCHILD | 98 = DON'T KNOW |
| 06 = PARENT | |
| 07 = PARENT-IN-LAW | |

HOUSEHOLD SCHEDULE

| LINE NO. | USUAL RESIDENTS AND VISITORS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE | | AGE | ELIGIBILITY |
|----------|--|---|----------------------------------|---------------------------------------|---|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | <p>Please give me the names of the persons who usually live in your household, starting with the head of the household.</p> <p>AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP, SEX, RESIDENCE, AGE, AND ELIGIBILITY FOR EACH PERSON, ASK QUESTIONS 2A-2B ON THE LAST PAGE OF THE SCHEDULE TO BE SURE THAT THE LISTING IS COMPLETE.</p> | <p>What is the relationship of (NAME) to the head of the household?</p> <p>SEE CODES BELOW.</p> | <p>Is (NAME) male or female?</p> | <p>Does (NAME) usually live here?</p> | <p>Did (NAME) stay here last night?</p> | <p>How old is (NAME)?</p> <p>IF 95 OR MORE, RECORD '95'.</p> | <p>CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49</p> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 11 | | <div><div></div><div></div></div> | M F 1 2 | Y N 1 2 | Y N 1 2 | IN YEARS <div><div></div><div></div></div> | 11 |
| 12 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 12 |
| 13 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 13 |
| 14 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 14 |
| 15 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 15 |
| 16 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 16 |
| 17 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 17 |
| 18 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 18 |
| 19 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 19 |
| 20 | | <div><div></div><div></div></div> | 1 2 | 1 2 | 1 2 | <div><div></div><div></div></div> | 20 |

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

| | |
|------------------------------------|-------------------------------|
| 01 = HEAD | 08 = BROTHER OR SISTER |
| 02 = WIFE OR HUSBAND | 09 = OTHER RELATIVE |
| 03 = SON OR DAUGHTER | 10 = ADOPTED/FOSTER/STEPCHILD |
| 04 = SON-IN-LAW OR DAUGHTER-IN-LAW | 11 = NOT RELATED |
| 05 = GRANDCHILD | 98 = DON'T KNOW |
| 06 = PARENT | |
| 07 = PARENT-IN-LAW | |

HOUSEHOLD SCHEDULE

| LINE NO. | USUAL RESIDENTS AND VISITORS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE | | AGE | ELIGIBILITY |
|----------|---|--|---------------------------|--------------------------------|----------------------------------|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Please give me the names of the persons who usually live in your household, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP, SEX, RESIDENCE, AGE, AND ELIGIBILITY FOR EACH PERSON, ASK QUESTIONS 2A-2B ON THE LAST PAGE OF THE SCHEDULE TO BE SURE THAT THE LISTING IS COMPLETE. | What is the relationship of (NAME) to the head of the household? SEE CODES BELOW. | Is (NAME) male or female? | Does (NAME) usually live here? | Did (NAME) stay here last night? | How old is (NAME)? IF 95 OR MORE, RECORD '95'. | CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 21 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | M F 1 2 | Y N 1 2 | Y N 1 2 | IN YEARS <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 21 |
| 22 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 22 |
| 23 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 23 |
| 24 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 24 |
| 25 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 25 |
| 26 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 26 |
| 27 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 27 |
| 28 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 28 |
| 29 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 29 |
| 30 | | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 1 2 | 1 2 | 1 2 | <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> | 30 |

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
 02 = WIFE OR HUSBAND
 03 = SON OR DAUGHTER
 04 = SON-IN-LAW OR DAUGHTER-IN-LAW

05 = GRANDCHILD
 06 = PARENT
 07 = PARENT-IN-LAW

08 = BROTHER OR SISTER
 09 = OTHER RELATIVE
 10 = ADOPTED/FOSTER/STEPCHILD
 11 = NOT RELATED
 98 = DON'T KNOW

2A) Just to make sure that I have a complete listing: are there any other persons such as small children or infants that we have not listed?

YES ☐ --> ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?

YES ☐ --> ADD TO TABLE NO ☐

| HOUSEHOLD CHARACTERISTICS | | | |
|---------------------------|--|---|--------------|
| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 101 | What is the main source of drinking water for members of your household? | PIPED WATER PIPED INTO DWELLING 11 PIPED TO YARD/PLOT 12 PUBLIC TAP 13 NEIGHBOR'S TAP 14 WATER FROM OPEN WELL OPEN WELL IN DWELLING 21 OPEN WELL IN YARD/PLOT 22 OPEN PUBLIC WELL 23 NEIGHBOR'S OPEN WELL 24 WATER FROM COVERED WELL OR BOREHOLE PROTECTED WELL IN DWELLING 31 PROTECTED WELL IN YARD/PLOT 32 PROTECTED PUBLIC WELL 33 NEIGHBOR'S BOREHOLE 34 SURFACE WATER SPRING 41 RIVER/STREAM 42 POND/LAKE 43 DAM 44 RAINWATER 51 TANKER TRUCK 61 WATER VENDOR 71 BOTTLED WATER 81 OTHER 96 (SPECIFY) | 101B 101B |
| 101A | Who is providing water at your main source? | AUTHORITY 1 CBO/NGO 2 PRIVATE OPERATOR 3 DON'T KNOW 8 | |
| 101B | How long does it take to go there, get water, and come back, including wait time? | MINUTES <input type="text"/> <input type="text"/> <input type="text"/> ON PREMISES 996 | |
| 101C | Do you do anything to the water to make it safer to drink? | YES 1 NO 2 DON'T KNOW 8 | 102 |
| 101D | What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED | BOIL A ADD BLEACH/CHLORINE B STRAIN THROUGH A CLOTH C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) D SOLAR DISINFECTION E LET IT STAND AND SETTLE F OTHER X (SPECIFY) DON'T KNOW Z | |

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|-------|-----|----|--------------|---|---|------------------|---|---|----------|---|---|---------------|---|---|---------------------|---|---|-------------------------------------|---|---|---------------------------------|---|---|-----------------|---|---|--|
| 102 | What kind of toilet facility do members of your household usually use? | FLUSH/ POUR FLUSH TO PIPED SEWER SYSTEM 11 FLUSH/ POUR FLUSH TO PIPED SEPTIC TANK 12 FLUSH/ POUR FLUSH TO PIT LATRINE 13 FLUSH/ POUR FLUSH TO ELSEWHERE 14 PIT LATRINE VENTILATED IMPROVED PIT LATRINE (VIP) 21 PIT LATRINE WITH SLAB 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT 23 COMPOSTING TOILET/ECOSAN 31 BUCKET 41 NO FACILITY/BUSH/FIELD 51 OTHER _____ 96 (SPECIFY) | → 104 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 103 | Do you share this toilet facility with other households? | YES 1 NO 2 | → 104 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 103A | How many households use this toilet facility? | NO. OF HOUSEHOLDS IF LESS THAN 10 <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 30px; height: 30px; text-align: center;">0</td> <td style="width: 30px; height: 30px;"></td> </tr> </table> 10 OR MORE HOUSEHOLDS 95 DON'T KNOW 98 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 104 | Does your household have: | <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th><th style="text-align: right;">YES</th><th style="text-align: right;">NO</th></tr> </thead> <tbody> <tr> <td>ELECTRICITY?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>A paraffin lamp?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>A radio?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>A television?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>A mobile telephone?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>A non-mobile telephone (land line)?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>An iron (charcoal or electric)?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> <tr> <td>A refrigerator?</td><td style="text-align: right;">1</td><td style="text-align: right;">2</td></tr> </tbody> </table> | | YES | NO | ELECTRICITY? | 1 | 2 | A paraffin lamp? | 1 | 2 | A radio? | 1 | 2 | A television? | 1 | 2 | A mobile telephone? | 1 | 2 | A non-mobile telephone (land line)? | 1 | 2 | An iron (charcoal or electric)? | 1 | 2 | A refrigerator? | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ELECTRICITY? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A paraffin lamp? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A radio? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A television? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A mobile telephone? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A non-mobile telephone (land line)? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| An iron (charcoal or electric)? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A refrigerator? | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 105 | What type of fuel does your household mainly use for cooking? | ELECTRICITY 01 BOTTLED GAS 02 PARAFFIN/KEROSENE 03 CHARCOAL 04 FIREWOOD 05 CROP RESIDUALS, STRAW, GRASS 06 ANIMAL DUNG 07 NO FOOD COOKED IN HOUSEHOLD 95 OTHER _____ 96 (SPECIFY) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 106 | What is the main source of energy for lighting in the household? | ELECTRICITY 01 SOLAR 02 GAS 03 PARAFFIN-HURRICANE LAMP 04 PARAFFIN-PRESSURE LAMP 05 PARAFFIN-WICK LAMP 06 FIREWOOD 07 CANDLES 08 OTHER _____ 96 (SPECIFY) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|------|-----|----|-------------|---|---|---------------|---|---|--------------------------|---|---|-----------------|---|---|--------------------|---|---|--|
| 107 | MAIN MATERIAL OF THE FLOOR RECORD OBSERVATION. MARK ONLY ONE. | EARTH, SAND, DUNG 11 WOOD, PLANKS, BAMBOO, PALM 21 PARQUET OR POLISHED WOOD 31 VINYL OR ASPHALT STRIPS 32 CERAMIC TILES, TERRAZZO 33 CEMENT 34 CARPET 35 OTHER 96 (SPECIFY) | | | | | | | | | | | | | | | | | | | |
| 108 | WALL MATERIAL RECORD OBSERVATION. MARK ONLY ONE. | GRASS 01 POLES AND MUD 02 SUN-DRIED BRICKS 03 BAKED BRICKS 04 WOOD, TIMBER 05 CEMENT BLOCKS 06 STONES 07 OTHER 96 (SPECIFY) | | | | | | | | | | | | | | | | | | | |
| 109 | ROOFING MATERIAL RECORD OBSERVATION. MARK ONLY ONE. | GRASS, THATCH, MUD 01 IRON SHEETS 02 TILES 03 CONCRETE 04 ASBESTOS 05 OTHER 96 (SPECIFY) | | | | | | | | | | | | | | | | | | | |
| 110 | How many rooms in this household are used for sleeping? (INCLUDING ROOMS OUTSIDE THE MAIN DWELLING) | ROOMS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 111 | Does any member of this household own: A watch? A bicycle? A motorcycle or motor scooter? A car or truck? A traditional or mobile (M-pesa etc) bank account? | <table border="0"> <thead> <tr> <th></th><th>YES</th><th>NO</th></tr> </thead> <tbody> <tr> <td>WATCH</td><td>1</td><td>2</td></tr> <tr> <td>BICYCLE</td><td>1</td><td>2</td></tr> <tr> <td>MOTORCYCLE/SCOOTER</td><td>1</td><td>2</td></tr> <tr> <td>CAR/TRUCK</td><td>1</td><td>2</td></tr> <tr> <td>BANK ACCOUNT</td><td>1</td><td>2</td></tr> </tbody> </table> | | YES | NO | WATCH | 1 | 2 | BICYCLE | 1 | 2 | MOTORCYCLE/SCOOTER | 1 | 2 | CAR/TRUCK | 1 | 2 | BANK ACCOUNT | 1 | 2 | |
| | YES | NO | | | | | | | | | | | | | | | | | | | |
| WATCH | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| BICYCLE | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| MOTORCYCLE/SCOOTER | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| CAR/TRUCK | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| BANK ACCOUNT | 1 | 2 | | | | | | | | | | | | | | | | | | | |
| 112 | How long would it take you to go, one way, to the nearest health facility? | MINUTES 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> HOURS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr></table> | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 113 | If you were to go to the nearest health facility, how would you go there? RECORD ALL MENTIONED | CAR/MOTORCYCLE A PUBLIC TRANSPORT (BUS, TAXI) B ANIMAL/ANIMAL CART C WALKING D BICYCLE E OTHER F (SPECIFY) | | | | | | | | | | | | | | | | | | | |

Appendix B: Individual Questionnaire

Note: Field version of questionnaire was translated in Swahili

**2014 REPRODUCTIVE HEALTH SURVEY, KIGOMA REGION
WOMAN'S QUESTIONNAIRE**

CONFIDENTIAL

| IDENTIFICATION | | | | |
|---|---|---|--|---|
| DISTRICT _____ WARD ENUMERATION AREA NAME OF HOUSEHOLD HEAD _____ HOUSEHOLD NUMBER _____ NAME AND LINE NUMBER OF WOMAN _____ | <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 5px;"></div> </div> | | | |
| INTERVIEWER VISITS | | | | |
| | 1 | 2 | 3 | FINAL VISIT |
| DATE | _____ | _____ | _____ | DAY <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| INTERVIEWER'S NAME | _____ | _____ | _____ | MONTH <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| INTERVIEWER ID | <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> | <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> | <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> | YEAR <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">2</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">0</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">1</div> <div style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">4</div> </div> |
| RESULT* | <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> | <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> | <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> | INTERVIEWER ID <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| NEXT VISIT: DATE | _____ | _____ | | TOTAL NUMBER OF VISITS <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |
| <p>*RESULT CODES:</p> 1 COMPLETED 2 NOT AT HOME 3 POSTPONED 4 REFUSED 5 PARTLY COMPLETED 6 INCAPACITATED 7 OTHER _____ <div style="text-align: center; margin-top: 5px;">(SPECIFY)</div> | | | | |
| SUPERVISOR FIELD EDITOR OFFICE EDITOR KEYED BY | | | | |
| NAME _____ <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> | | NAME _____ <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> | | <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; width: 20px; height: 20px;"></div> </div> |

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Ministry of Health and Social Welfare. We are conducting a survey about health in Kigoma. The information we collect will help the government to plan health services. Your household was selected for the survey. The survey usually takes about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED 1 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2 → END
↓

**2014 REPRODUCTIVE HEALTH SURVEY
KIGOMA REGION
INDIVIDUAL QUESTIONNAIRE**

| EA Number | Household number | Woman's line number |
|-----------|------------------|---------------------|
| | | |

TIME THE INTERVIEW STARTED: HOUR (24 HOURS) MIN

SECTION I – RESPONDENT'S BACKGROUND

| | |
|---|--|
| 101. In what month and year were you born? | <div style="display: flex; align-items: center; margin-bottom: 5px;"> MONTH YEAR </div> <div>88. DON'T KNOW MONTH 8888. DON'T KNOW YEAR</div> |
| 102. How old were you on your last birthday? | <div style="display: flex; align-items: center;"> YEARS </div> |
| 103. Have you ever attended school? | <div>1. YES</div> <div>2. NO → Q105</div> |
| 104. What is the highest level of school you attended? | <div>1. PREPRIMARY</div> <div>2. PRIMARY</div> <div>3. POST-PRIMARY TRAINING</div> <div>4. SECONDARY</div> <div>5. POST-SECONDARY TRAINING</div> <div>6. UNIVERSITY</div> |
| 104A. What is the highest grade you completed at that level? IF COMPLETED LESS THAN ONE GRADE AT THAT LEVEL, RECORD '00'. | <div style="display: flex; align-items: center;"> GRADE </div> |
| 104B. Are you still attending school? | <div>1. YES → Q105</div> <div>2. NO</div> |
| 104C. How old were you when you last attended school? | <div style="display: flex; align-items: center;"> YEARS </div> <div>88. DON'T KNOW</div> |
| 105. How often do you attend religious services? | <div>1. SEVERAL TIMES A DAY</div> <div>2. ONCE A DAY</div> <div>3. AT LEAST ONCE A WEEK</div> <div>4. AT LEAST ONCE A MONTH</div> <div>5. LESS THAN ONCE A MONTH</div> <div>6. ONLY FOR SPECIAL OCCASIONS</div> <div>7. DOES NOT ATTEND AT ALL</div> <div>9. REFUSED</div> |

| | |
|---|---|
| <p>106A. Aside from your household chores and work, did you do any work outside the home in the past 12 months for which you received money?</p> | <p>1. YES 2. NO</p> |
| <p>106B. Aside from your household chores and work, did you do any work outside the home in the past 12 months for which you were paid in goods?</p> <p>IF BOTH Q106A AND Q106B = 2, SKIP TO Q108A.</p> | <p>1. YES 2. NO</p> |
| <p>107. Would you say that the money that <u>you</u> earn covers none, some, or all/most of your household expenses?</p> | <p>1. NONE 2. SOME 3. ALL/MOST</p> |
| <p>108A. Now I would like to ask you some questions about your work and the ownership of goods in your household. Do you have any cash savings of your own?</p> | <p>1. YES 2. NO</p> |
| <p>108B. Do you have any land that is owned by you alone?</p> | <p>1. YES 2. NO</p> |
| <p>108C. Do you own any assets that could help you generate income?</p> | <p>1. YES 2. NO</p> |
| <p>111. How often do you listen to the radio?</p> | <p>1. ALMOST EVERY DAY 2. AT LEAST ONCE A WEEK 3. LESS THAN ONCE A WEEK 4. NOT AT ALL</p> |
| <p>112. How often do you watch television?</p> | <p>1. ALMOST EVERY DAY 2. AT LEAST ONCE A WEEK 3. LESS THAN ONCE A WEEK 4. NOT AT ALL</p> |

SECTION II – RELATIONSHIP STATUS AND PARTNERSHIP HISTORY

Now, I would like to ask you some questions about your steady relationships.

| 201. Are you currently married or living with a man as if married? | 1. YES, CURRENTLY MARRIED → 204 2. YES, LIVING WITH A MAN → 204 3. NO, NOT IN UNION | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|-----------------------------------|--|-----------------------------------|------------------------|-----------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 202. Have you ever been married or lived together with a man as if married? | 1. YES, FORMERLY MARRIED 2. YES, LIVED WITH A MAN 3. NO → SECTION III | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 203. What is your marital status now: are you widowed, divorced, or separated? | 1. WIDOWED 2. DIVORCED 3. SEPARATED <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> } → Q207 </div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 204. In what month and year did you start living with your (husband/partner)? | <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> </div> <div>MONTH</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> </div> <div>YEAR</div> </div> <p>88. DOES NOT REMEMBER MONTH 8888. DOES NOT REMEMBER YEAR</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 205. How old were you when you first started living with him? | <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> </div> <div>YEARS</div> </div> <p>88. DOES NOT REMEMBER 99. REFUSED</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 205A. Now I would like to ask you about who usually makes decisions in your household. Would this person be: you, your husband/partner, both you and your husband/partner together, your husband/partner's parents, your own parents, or someone else? Which member of your household usually makes decisions about: (READ A-F) A. Your health care? B. Making large household purchases? C. Making household purchases for daily needs? D. How to use the money that <u>you</u> bring into the household? E. How to use the money that your partner brings into the household? F. Whether you are allowed to work to earn money? | <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 12.5%;"><u>WOMAN ONLY</u></th> <th style="width: 12.5%;"><u>HUSBAND/ PARTNER ONLY</u></th> <th style="width: 12.5%;"><u>BOTH WOMAN & HUSBAND/ PARTNER</u></th> <th style="width: 12.5%;"><u>HUSBAND/ PARTNER'S PARENTS</u></th> <th style="width: 12.5%;"><u>WOMAN'S PARENTS</u></th> <th style="width: 12.5%;"><u>SOME- ONE ELSE</u></th> <th style="width: 12.5%;"><u>NA</u></th> </tr> </thead> <tbody> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>9</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>9</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>9</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>9</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>9</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>9</td> </tr> </tbody> </table> | <u>WOMAN ONLY</u> | <u>HUSBAND/ PARTNER ONLY</u> | <u>BOTH WOMAN & HUSBAND/ PARTNER</u> | <u>HUSBAND/ PARTNER'S PARENTS</u> | <u>WOMAN'S PARENTS</u> | <u>SOME- ONE ELSE</u> | <u>NA</u> | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 9 |
| <u>WOMAN ONLY</u> | <u>HUSBAND/ PARTNER ONLY</u> | <u>BOTH WOMAN & HUSBAND/ PARTNER</u> | <u>HUSBAND/ PARTNER'S PARENTS</u> | <u>WOMAN'S PARENTS</u> | <u>SOME- ONE ELSE</u> | <u>NA</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 206. Have you been married or lived with a man only once or more than once? | 1. ONLY ONCE → GO TO SECTION III 2. MORE THAN ONCE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 207. In what month and year did you start your first legal or common-law marriage? | <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> </div> <div>MONTH</div> <div style="border: 1px solid black; width: 60px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> </div> <div>YEAR</div> </div> <p>88. DOES NOT REMEMBER MONTH 8888. DOES NOT REMEMBER YEAR</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 208. How old were you when you first started living with him? | <div style="display: flex; align-items: center; gap: 10px;"> <div style="border: 1px solid black; width: 30px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> <div style="width: 15px; height: 15px; border: 1px solid black;"></div> </div> <div>YEARS</div> </div> <p>88. DOES NOT REMEMBER 99. REFUSED</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SECTION III – FERTILITY

Now, we are going to talk about your history of menstruation and your pregnancy history. Some of the questions may not apply to you. In these cases, just say so.

| | |
|--|---|
| 301. How old were you when your first period (menstruation) started? (PROBE: woman's monthly bleeding) | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> YEARS 77. NEVER HAD A PERIOD → Q303 |
| 302. How long has it been since your last menstrual period? | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> MONTHS 00. UP TO ONE MONTH 55. CURRENTLY HAVING A PERIOD 66. DO NOT HAVE A PERIOD ANY MORE 77. BEFORE LAST/ CURRENT PREGNANCY 88. DON'T REMEMBER |
| 303. Are you currently pregnant? | 1. YES 2. NO → Q308 8. NOT SURE → Q308 |
| 304. How many months pregnant are you now? | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> MONTHS 88. NOT SURE |
| 305. Just before you got pregnant, did you want to get pregnant then, did you want to get pregnant later, or did you not want to get pregnant then or any time in the future? | 1. WANTED THE PREGNANCY THEN 2. WANTED THE PREGNANCY LATER 3. DID NOT WANT THE PREGNANCY 8. NOT SURE |
| 306. Is this your first pregnancy? | 1. YES 2. NO → Q310 8. NOT SURE |
| 307. Have you ever had a stillbirth, ectopic pregnancy, miscarriage, or an induced abortion? | 1. YES → 315 2. NO → SECTION V |
| 308. Have you ever been pregnant? | 1. YES → Q310 2. NO 8. NOT SURE |
| 309. Have you ever had a stillbirth, ectopic pregnancy, miscarriage, or an induced abortion? | 1. YES → 315 2. NO → SECTION V |
| 310. How many children have you given birth to who live with you now? | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> CHILDREN |
| 311. How many children have you given birth to who live somewhere else? | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> CHILDREN |
| 312. Have you ever had a child born alive who later died, including those who may have died in the first hours or days after birth? | 1. YES 2. NO → Q314 |
| 313. How many children were born alive but later died? | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> CHILDREN |
| 314. So altogether you had a total of (ADD NUMBER OF CHILDREN FROM Q310+Q311+Q313) live births? | <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 30px; height: 20px; margin-right: 5px;"></div> LIVE BIRTHS |

PREGNANCY HISTORY

Now I would like to talk to you about all your pregnancies (not counting the current one). Please, make sure you include all pregnancies, it doesn't matter when they happened or how they ended, whether in a live birth, a stillbirth, an ectopic pregnancy, an abortion, or a miscarriage. Starting with your most recent pregnancy, please give me the following information:

| # | 315 | 316 | 317 | 318 | 319 | 320 | 321 |
|---|---|---|---|---|-----------------------------|---|--|
| | How did that pregnancy end? | When did that pregnancy end? (month & year) | How many weeks or months had you been pregnant when that pregnancy ended? | IF 315=1, 2, or 3 What is the name of the child? | Was (NAME) a boy or a girl? | Is (NAME) still alive? | How old was (NAME) when he died? (RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YRS.) |
| 1 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 2 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 3 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 4 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |

| # | 315 | 316 | 317 | 318 | 319 | 320 | 321 |
|---|---|---|---|---|-----------------------------|---|--|
| | How did that pregnancy end? | When did that pregnancy end? (month & year) | How many weeks or months had you been pregnant when that pregnancy ended? | IF 315=1, 2, or 3 What is the name of the child? | Was (NAME) a boy or a girl? | Is (NAME) still alive? | How old was (NAME) when he died? (RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YRS.) |
| 5 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 6 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 7 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 8 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |

| # | 315 | 316 | 317 | 318 | 319 | 320 | 321 |
|-----------|---|---|---|---|-----------------------------|---|---|
| | How did that pregnancy end? | When did that pregnancy end? (month & year) | How many weeks or months had you been pregnant when that pregnancy ended? | IF 315=1, 2, or 3 What is the name of the child? | Was (NAME) a boy or a girl? | Is (NAME) still alive? | How old was (NAME) when he died? (RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YRS.) |
| <u>9</u> | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| <u>10</u> | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| <u>11</u> | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| <u>12</u> | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |

| # | 315 | 316 | 317 | 318 | 319 | 320 | 321 |
|----|---|---|---|---|-----------------------------|---|--|
| | How did that pregnancy end? | When did that pregnancy end? (month & year) | How many weeks or months had you been pregnant when that pregnancy ended? | IF 315=1, 2, or 3 What is the name of the child? | Was (NAME) a boy or a girl? | Is (NAME) still alive? | How old was (NAME) when he died? (RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YRS.) |
| 13 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 14 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 15 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 16 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO 2nd Twin: 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |

| # | 315 | 316 | 317 | 318 | 319 | 320 | 321 |
|----|---|---|---|---|-----------------------------|---|---|
| | How did that pregnancy end? | When did that pregnancy end? (month & year) | How many weeks or months had you been pregnant when that pregnancy ended? | IF 315=1, 2, or 3 What is the name of the child? | Was (NAME) a boy or a girl? | Is (NAME) still alive? | How old was (NAME) when he died? (RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YRS.) |
| 17 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 18 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 19 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |
| 20 | 1. LIVE BIRTH (SINGLE) 2. MULTIPLE LIVE BIRTH 3. MULTIPLE (LB WITH SB) 4. STILLBIRTH (SINGLE) 5. MULTIPLE STILLBIRTH 6. MISCARRIAGE/ABORTION 7. ECTOPIC PREGNANCY | ___ MTH ___ YR 99. NR | 1. ___ WKS OR 2. ___ MTHS 8. 8 8 DNK 9. 9 9 NR/REF IF Q315=4,5,6, OR 7 GO TO NEXT ROW | IF 315=1, 2, or 3, RECORD NAME. _____ IF Q315=2 RECORD 2 ND TWIN NAME. _____ | 1. BOY 2. GIRL | 1.YES-> GO TO NEXT ROW 2. NO | 1. ___ DAYS 2. ___ MTHS 3. ___ YEARS 9. 9 9 NR/REF |

SECTION IV: HEALTH CARE FOR BIRTHS SINCE JANUARY 2009
LAST BIRTH

| | |
|---|---|
| <p>400. INTERVIEWER, CHECK THE PREGNANCY HISTORY AND RECORD THE TOTAL NUMBER OF PREGNANCIES THAT ENDED IN EITHER LIVEBIRTHS OR STILLBIRTHS (Q315= 1,2,3,4, or 5) SINCE JANUARY 2009.</p> <p>INTERVIEWER: THIS IS THE TOTAL NUMBER OF PREGNANCIES YOU SHOULD REGISTER IN SECTION IV (UP TO 3.)</p> | <p>1. TOTAL PREGNANCIES <input type="text"/> ENDING IN LIVEBIRTHS OR STILLBIRTHS</p> <p>2. IF NONE SINCE JANUARY 2009 → SECTION V</p> |
| <p>401. COPY THE PREGNANCY NUMBER AND OUTCOME OF THE LAST BIRTH SINCE 2009 ON PAGE 5</p> | <p>PREGNANCY # <input type="text"/></p> <p>PREGNANCY OUTCOME CODE:</p> <p>"1", "2", "3", "4, or "5"</p> <p><input type="text"/></p> <p>IF CODE= 1, 2, or 3, RECORD:</p> <p>NAME: _____</p> <p>STILL ALIVE? (Q320=1)</p> <p>1. YES</p> <p>2. NO</p> |
| <p>402. Now, I would like to talk to you about your last birth. <u>Just before you got pregnant</u>, did you want to get pregnant then, did you want to get pregnant later, or did you not want to get pregnant then or any time in the future?</p> | <p>1. WANTED THE PREGNANCY THEN</p> <p>2. WANTED THE PREGNANCY LATER</p> <p>3. DID NOT WANT THE PREGNANCY</p> <p>8. NOT SURE</p> |
| <p>403. While you were pregnant with that baby (babies if twin pregnancy), how often did you usually drink beer, stout, wine, rum, liquor or other alcoholic drinks?</p> | <p>0. NOT AT ALL</p> <p>1. <ONCE A MONTH</p> <p>2. 1 OR 2 DAYS A MONTH</p> <p>3. 1 OR 2 DAYS A WEEK</p> <p>4. 3-4 DAYS A WEEK</p> <p>5. NEARLY EVERY DAY</p> <p>8. DON'T REMEMBER</p> <p>9. REFUSED</p> |
| <p>404. On the average, how many cigarettes did you smoke per day during that pregnancy?</p> | <p>0. NONE</p> <p>1. 1-4 (JUST A FEW)</p> <p>2. 5-10 CIGARETTES (OR ½ PACK)</p> <p>3. 11+ (MORE THAN ½ PACK)</p> <p>8. DON'T REMEMBER</p> |
| <p>405. Were you given any injection to prevent the baby from getting tetanus (i.e., <i>lock jaw</i>) during that pregnancy?</p> | <p>1. YES - FOR TETANUS</p> <p>2. YES - DON'T KNOW WHAT FOR</p> <p>3. NO → Q407</p> |
| <p>406. How many injections were given?</p> | <p><input type="text"/> INJECTIONS</p> <p>8 NOT SURE</p> |
| <p>407. Did you see anyone for antenatal care during that pregnancy?</p> | <p>1. YES → Q408</p> <p>2. NO</p> |
| <p>407A. Why didn't you go for antenatal care?</p> <p>PROBE: Any other reason?</p> <p>RECORD ALL MENTIONED, THEN GO TO Q414A</p> | <p>A. COST TOO MUCH</p> <p>B. FACILITY FAR AWAY</p> <p>C. TRANSPORTATION UNAVAILABLE/EXPENSIVE</p> <p>D. DON'T TRUST FACILITY/POOR QUALITY SERVICE</p> <p>E. NO FEMALE PROVIDER AT FACILITY</p> <p>F. HUSBAND/FAMILY DID NOT ALLOW</p> <p>G. NOT NECESSARY</p> <p>H. NOT CUSTOMARY</p> <p>I. OTHER _____</p> <p align="center">GO TO Q414A</p> |
| <p>408. Where did you go for antenatal care?</p> <p>RECORD ALL MENTIONED.</p> | <p>A. HOSPITAL _____(SPECIFY)</p> <p>B. HEALTH CENTER _____(SPECIFY)</p> <p>C. DISPENSARY</p> <p>D. HOME</p> <p>E. CBD WORKER</p> <p>F. COMMUNITY HEALTH WORKER (CHW)</p> <p>G. TRAINED BIRTH ATTENDANT</p> <p>H. OTHER _____(SPECIFY)</p> |

| 409. | How many times did you go? | <input type="text"/> <input type="text"/> TIMES 77 NOT SURE 88 DOES NOT REMEMBER | | | | | | | | | | | | | |
|--------|---|--|--|-----|----|---|---|---|---|---|---|---|---|---|---|
| 410. | In what month of the pregnancy did the antenatal care begin? | <input type="text"/> <input type="text"/> MONTH 88 DOES NOT REMEMBER | | | | | | | | | | | | | |
| 411. | During this pregnancy, were any of the following done at least once: A. Were you weighed? B. Was your height measured? C. Did you give a urine sample? D. Did you give a blood sample? E. Were you tested for HIV? | A. WEIGHT B. HEIGHT C. URINE SAMPLE D. BLOOD SAMPLE E. HIV TESTED | <table border="1"> <thead> <tr> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> </tbody> </table> | YES | NO | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| YES | NO | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 412A. | Was your blood pressure ever checked during that pregnancy? | 1. YES 2. NO → Q413A 8. DOES NOT REMEMBER → Q413A | | | | | | | | | | | | | |
| 412B. | During this pregnancy, were you told that your blood pressure was high? | 1. YES 2. NO 8. DOES NOT REMEMBER | | | | | | | | | | | | | |
| 413A. | Were you told about the signs of pregnancy complications? | 1. YES 2. NO 8. DOES NOT REMEMBER | | | | | | | | | | | | | |
| 413A2. | In your opinion, what are some of the serious health problems that can occur during pregnancy and around labor and childbirth that could endanger the life of a pregnant woman? RECORD ALL MENTIONED. | A. SEVERE VAGINAL BLEEDING B. SWOLLEN HANDS/FACE C. BLURRED VISION D. PROLONGED LABOR (>12 HOURS) E. CONVULSIONS F. RETAINED PLACENTA G. FOUL SMELLING VAGINAL DISCHARGE H. HIGH FEVER I. OTHER (SPECIFY) _____ Z. NONE MENTIONED | | | | | | | | | | | | | |
| 413B. | Were you advised to develop a birth plan? | 1. YES 2. NO 8. DOES NOT REMEMBER | | | | | | | | | | | | | |
| 413B2. | What arrangements did you or your family make for the birth of this child? Did you: A. Identify transport? B. Save money? C. Identify a blood donor? D. Identify a nurse, midwife, or doctor to deliver the baby? | A. TRANSPORT B. SAVE MONEY C. BLOOD DONOR D. SKILLED ATTENDANT | <table border="1"> <thead> <tr> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> </tbody> </table> | YES | NO | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | | |
| YES | NO | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 413C. | Were you told about family planning (ways to avoid or delay a pregnancy)? | 1. YES 2. NO 8. DOES NOT REMEMBER | | | | | | | | | | | | | |
| 414A. | Did you sleep under insecticide-treated bed nets (ITN) most of the time? | 1. YES 2. NO 8. DOES NOT REMEMBER | | | | | | | | | | | | | |
| 414B. | Did you take any drugs to keep you from getting malaria? | 1. YES 2. NO → Q414D 8. DOES NOT REMEMBER → Q414D | | | | | | | | | | | | | |
| 414C. | What drugs did you take? RECORD ALL MENTIONED. | A. SP/FANSIDAR B. CHLOROQUINE C. OTHER _____ (SPECIFY) Y. DON'T KNOW | | | | | | | | | | | | | |
| 414D. | Did you take any local herbs during your pregnancy? | 1. YES 2. NO → Q415 8. DOES NOT REMEMBER → Q415 | | | | | | | | | | | | | |
| 414E. | For what reasons did you take the local herbs? RECORD ALL MENTIONED | A. TO INDUCE LABOR B. MALARIA C. COLD/FLU D. HEADACHE E. CONVULSIONS F. VAGINAL BLEEDING G. STOMACH PAIN H. FOR THE HEALTH OF THE CHILD I. TO AVOID MISCARRIAGE J. OTHER (SPECIFY) _____ | | | | | | | | | | | | | |

| | | |
|--------------|---|--|
| 414F. | How many days did you take local herbs during the pregnancy? | _____ DAYS 777. CONTINUOUSLY 888. DOES NOT REMEMBER |
| 414G. | In what month of the pregnancy did you begin using local herbs? | _____ MONTH 77. JUST BEFORE DELIVERY 88. DOES NOT REMEMBER |
| 415. | Before you delivered the baby , how long had you been in labor (strong, regular and frequent contractions at least 5 minutes apart)? | _____ HOURS 77. C-SECTION BEFORE LABOR 88. DOESN'T KNOW |
| 416A. | Where did you give birth to your last baby? | KIGOMA HOSPITAL CODES: MAWENI: A KASULU: B KIBONDO: C KABANGA: D HERI ADVENTIST: E BAPTIST: F 1. KIGOMA HOSPITAL: CODE _____ 2. OTHER HOSPITAL: _____ (SPECIFY) 3. HEALTH CENTER _____ (SPECIFY) 4. DISPENSARY: _____ (SPECIFY) 5. ON THE WAY TO A HEALTH FACILITY 6. YOUR HOME → Q419A 7. OTHER HOME → Q419A 8. OTHER _____ (SPECIFY) → Q419A |
| 416B. | Were you referred? | 1. YES 2. NO INTERVIEWER: IF Q416A=5, GO TO Q419B |
| 417A. | How long did it take you, one-way, to get from your home to the health facility where you delivered? | 1. _____ MINUTES OR 2. _____ HOURS 888. DON'T REMEMBER |
| 417B. | How did you get to the health facility? PROBE: Any other way? RECORD ALL MENTIONED | A. WALKED / ON FOOT B. BICYCLE C. MOTORCYCLE D. CAR / TRUCK E. BOAT F. OTHER _____ (SPECIFY) |
| 417C. | How much did you pay for transport to the facility, in total? | _____ TSH 000000. NONE 777777. PAID IN-KIND 888888. DOESN'T KNOW |
| 417D. | Were you exempted from paying for delivery care? | 1. YES → Q417F 2. NO |
| 417E. | How much did you pay for delivery care at the facility? | _____ TSH 000000. NONE 777777. PAID IN-KIND 888888. DOESN'T KNOW |
| 417F. | How much did you pay in informal fees at the facility? | _____ TSH 000000. NONE 777777. PAID IN-KIND 888888. DOESN'T KNOW |
| 417G. | Did the facility provide supplies for childbirth? | 1. YES 2. NO → Q417I |
| 417H. | How much did you pay for supplies at the facility? | _____ TSH 000000. NONE 777777. PAID IN-KIND 888888. DOESN'T KNOW |
| 417I. | How much did you pay for any supplies that you brought? | _____ TSH 000000. NONE 777777. PAID IN-KIND 888888. DOESN'T KNOW |
| 417J. | How much did you pay for any medications? | _____ TSH 000000. NONE 777777. PAID IN-KIND 888888. DOESN'T KNOW |

| | |
|---|--|
| 417K. How much did you pay for accommodation near the facility? | <div>_____ TSH</div> <div>000000. NONE</div> <div>777777. PAID IN-KIND</div> <div>888888. DOESN'T KNOW</div> |
| 417L. How much did you pay for food at the facility? | <div>_____ TSH</div> <div>000000. NONE</div> <div>777777. PAID IN-KIND</div> <div>888888. DOESN'T KNOW</div> |
| 417M. How much did you pay for care for your dependents back home? | <div>_____ TSH</div> <div>000000. NONE</div> <div>777777. PAID IN-KIND</div> <div>888888. DOESN'T KNOW</div> |
| 417N. How much did you pay for any other expenses related to your delivery? (SPECIFY OTHER EXPENSES) _____ | <div>_____ TSH</div> <div>000000. NONE</div> <div>777777. PAID IN-KIND</div> <div>888888. DOESN'T KNOW</div> |
| 417O. Were you treated respectfully by the medical staff at the facility? | <div>1. YES</div> <div>2. NO</div> <div>8. DOESN'T KNOW / REMEMBER</div> |
| 418. Was the baby delivered by caesarean section; that is, did they cut your belly open to take the baby out? RECORD RESPONSE. THEN GO TO Q419B. | <div>1. YES → Q419B</div> <div>2. NO → Q419B</div> |
| 419A. Why did you decide to not deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED | <div>A. COST TOO MUCH TO DELIVER AT FACILITY</div> <div>B. FACILITY NOT OPEN</div> <div>C. FACILITY FAR AWAY</div> <div>D. TRANSPORTATION UNAVAILABLE</div> <div>E. TRANSPORTATION EXPENSIVE</div> <div>F. DON'T TRUST FACILITY</div> <div>G. EXPECT POOR QUALITY SERVICE/CARE</div> <div>H. FEAR OF ABUSE/DISRESPECT AT FACILITY</div> <div>I. LACK OF ALTERNATIVE CARE FOR FAMILY</div> <div>J. NO ACCOMODATIONS NEAR FACILITY</div> <div>K. NO FEMALE PROVIDER AT FACILITY</div> <div>L. BABY CAME EARLIER THAN EXPECTED</div> <div>M. HUSBAND/FAMILY DID NOT ALLOW</div> <div>N. NOT NECESSARY</div> <div>O. NOT CUSTOMARY</div> <div>P. OTHER (SPECIFY)</div> |
| 419AA. What was the most important reason? WRITE THE LETTER FOR THE MOST IMPORTANT REASON MENTIONED IN Q419A. | <div><input type="text"/></div> |
| 419B. Who made the decision about where to deliver the baby? | <div>1. PREGNANT WOMAN HERSELF</div> <div>2. HUSBAND/PARTNER</div> <div>3. BOTH WOMAN AND HUSBAND/PARTNER</div> <div>4. HUSBAND'S FATHER</div> <div>5. HUSBAND'S MOTHER</div> <div>6. PREGNANT WOMAN'S FATHER</div> <div>7. PREGNANT WOMAN'S MOTHER</div> <div>8. OTHER (SPECIFY)</div> |
| 420. Who assisted with the delivery? PROBE: Anyone else? RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT DELIVERY. | <div>A. DOCTOR / ASSISTANT MEDICAL OFFICER</div> <div>B. CLINICAL OFFICER</div> <div>C. ASSISTANT CLINICAL OFFICER</div> <div>D. TRAINED NURSE / MIDWIFE</div> <div>E. MCH AIDE</div> <div>F. MEDICAL ATTENDANT</div> <div>G. NURSE ASSISTANT</div> <div>H. VILLAGE HEALTH WORKER</div> <div>I. TBA</div> <div>J. RELATIVE/FRIEND</div> <div>K. OTHER (SPECIFY)</div> <div>L. NO ONE</div> <div>M. DOESN'T KNOW</div> |

| 421. During the first 6 weeks after the birth, did you have any of the following complications? READ A–K. RECORD ALL MENTIONED. A. Severe Bleeding B. Bad-smelling Vaginal Discharge C. Infection of Surgical Wound D. Faint/coma E. High Fever (39–40c) F. Painful Urination G. Painful Uterus (pelvic pain) H. Breast Infection I. Continuous leaking of urine from the vagina J. Continuous leaking of faeces from the vagina K. Any other complication? | A. SEVERE BLEEDING B. BAD-SMELLING VAGINAL DISCHARGE C. INFECTION OF SURGICAL WOUND D. FAINT/COMA E. HIGH FEVER (39-40C) F. PAINFUL URINATION G. PAINFUL UTERUS (PELVIC PAIN) H. BREAST INFECTION I. CONTINUOUS LEAKING OF URINE FROM VAGINA J. CONTINUOUS LEAKING OF FAECES FROM VAGINA K. OTHER _____ (SPECIFY) | <table border="1"> <thead> <tr> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> </tbody> </table> | YES | NO | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
|---|--|--|-----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YES | NO | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 422. Did you have any seizures or convulsions while pregnant, in labor or immediately after delivery? PROBE: Were you told that you had eclampsia? | 1. YES 2. NO 8. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | | | | | | | |
| 423A. REVIEW 416A: IF DELIVERY OCCURRED IN A FACILITY (416A=1-4), ASK: After you left the facility, did any health care provider or a traditional birth attendant check on your health? IF DELIVERY OCCURRED OUTSIDE A FACILITY (416A=5-8), ASK: After the baby was born, did any health care provider or a traditional birth attendant check on your health? | 1. YES 2. NO → Q424A 8. DOES NOT REMEMBER → Q424A | | | | | | | | | | | | | | | | | | | | | | | | | |
| 423B. How long after delivery did the first check take place? INTERVIEWER: IF 'SAME DAY', PROBE TO BE SURE THE CHECK OCCURRED DURING A SEPARATE VISIT. | 1. ____ DAYS 2. ____ WEEKS 000. SAME DAY 888. DON'T REMEMBER | | | | | | | | | | | | | | | | | | | | | | | | | |
| 423C. Where did the first check take place? | 1. HOSPITAL _____ (SPECIFY) 2. HEALTH CENTER _____ (SPECIFY) 3. DISPENSARY 4. HOME 5. CBD WORKER 6. OTHER _____ (SPECIFY) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 424A. At any time during that pregnancy, including after delivery, were you counseled about family planning? | 1. YES 2. NO → Q425F 8. DOES NOT KNOW → Q425F | | | | | | | | | | | | | | | | | | | | | | | | | |
| 424B. When did you receive counseling about family planning? RECORD ALL MENTIONED. | A. ANTENATAL CARE B. AT THE TIME OF DELIVERY C. POSTPARTUM CHECK UP D. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | | | | | | | |
| 424C. INTERVIEWER: REVIEW 424B. IF B OR C IS CIRCLED, CONTINUE. IF NOT, SKIP TO Q425F. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 424D. Where did you receive postnatal family planning counseling? RECORD ALL MENTIONED | A. HOSPITAL _____ (SPECIFY) B. HEALTH CENTER _____ (SPECIFY) C. DISPENSARY D. HOME E. CBD WORKER F. OTHER _____ (SPECIFY) | | | | | | | | | | | | | | | | | | | | | | | | | |
| 425F. INTERVIEWER: REVIEW Q401. IF THE PREGNANCY OUTCOME WAS NOT A LIVE BIRTH (Q401=4 OR 5), SKIP TO Q431. IF THE PREGNANCY OUTCOME IS A LIVE BIRTH (Q401= 1, 2 OR 3), CONTINUE. IF THE PREGNANCY OUTCOME IS A LIVE BIRTH AND A STILLBIRTH (Q401= 3), ASK ABOUT THE LIVE BIRTH. PREGNANCY OUTCOME: <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 426A. Was (NAME) weighed at birth? | 1. YES 2. NO → Q426C 8. DOESN'T KNOW → Q426C | | | | | | | | | | | | | | | | | | | | | | | | | |
| 426B. How much did (NAME) weigh? | ____ . ____ KILOGRAMS--> GO TO Q427 88. DON'T KNOW | | | | | | | | | | | | | | | | | | | | | | | | | |

| 426C. | Do you know if (NAME) weighed less than 2.5 kg or was considered too small? | 1. YES, WAS LESS THAN 2.5 kg 2. NO, WAS MORE THAN 2.5 kg 8. DOESN'T KNOW/DR | | | | | | | | | | | | | |
|--|---|---|--|-----|----|---|---|---|---|---|---|---|---|---|---|
| 427. | Does (NAME) have a birth certificate? | 1. YES 2. NO 8. DOES NOT KNOW | | | | | | | | | | | | | |
| 428A. | Did you ever breastfeed (NAME)? | 1. YES 2. NO → Q429A | | | | | | | | | | | | | |
| 428B. | How long after birth did you first put (NAME) to the breast? | 000. WITHIN ONE HOUR HOURS 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> DAYS 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> 888. DO NOT REMEMBER | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 428C. | CHECK 320: IS THE CHILD STILL LIVING? | 1. YES 2. NO → Q428G | | | | | | | | | | | | | |
| 428D. | Are you still breastfeeding (NAME)? | 1. YES 2. NO → Q428G | | | | | | | | | | | | | |
| 428E. | Now I would like to ask you about liquids or foods (NAME) had yesterday during the day or night. Did (NAME) drink/eat: READ A–E. RECORD ALL MENTIONED. A. Plain water? B. Commercially produced infant formula? C. Any [BRAND NAME OF COMMERCIALLY FORTIFIED BABY FOOD, E.G. Cerelac]? D. Any milk from animals? E. Any (other) porridge like ugali? | A. PLAIN WATER B. FORMULA C. BABY CEREAL D. ANIMAL MILK E. PORRIDGE/UGALI | <table border="1"> <thead> <tr> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> <tr> <td>1</td> <td>2</td> </tr> </tbody> </table> | YES | NO | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| YES | NO | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | | | | | | | | | | | | | | |
| CHECK Q428E: IF THE CHILD HAD ANY OF THE FOOD/DRINK LISTED (ANY 'YES' RESPONSES) SKIP TO Q429A. IF THE CHILD DID NOT HAVE ANY OF THE FOOD/DRINK (ALL 'NO' RESPONSES), CONTINUE. | | | | | | | | | | | | | | | |
| 428F. | Aside from breastmilk, did (NAME) have anything at all to eat or drink yesterday or last night? RECORD RESPONSE. THEN GO TO Q429A. | 1. YES 2. NO 8. DOES NOT KNOW GO TO Q429A. | | | | | | | | | | | | | |
| 428G. | For how many months did you breastfeed (NAME)? | <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> MONTHS 88. DO NOT REMEMBER | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 429A. | In the two months after (NAME) was born, did any health care provider or traditional birth attendant check on his/her health? | 1. YES 2. NO → GO TO Q431 3. NO, BABY DIED → GO TO Q431 8. DOES NOT REMEMBER → GO TO Q431 | | | | | | | | | | | | | |
| 429B. | How many days or weeks after (NAME's) birth did the first health check take place? | 1. ____ DAYS OR 2. ____ WEEKS 000. SAME DAY 888. DO NOT REMEMBER | | | | | | | | | | | | | |
| 430. | Was the health check because (NAME) was sick or was it a routine health exam? | 1. HEALTH CHECK FOR SICKNESS 2. ROUTINE HEALTH CHECK 8. DOES NOT REMEMBER | | | | | | | | | | | | | |
| 431. | How many months after (NAME's) birth did your period (menstruation) return? | <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> MONTHS 66. NOT YET RESUMED | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 432. | How many months after (NAME's) birth did you resume sexual relations? | <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 30px; height: 20px;"></td><td style="width: 30px; height: 20px;"></td></tr></table> MONTHS 66. NOT YET RESUMED | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

SECTION IV: HEALTH CARE FOR BIRTHS SINCE JANUARY 2009
SECOND TWIN, IF LAST BIRTH WAS TWINS

| 433. WAS THE LAST BIRTH A TWIN BIRTH (Q315=2)? | 1. YES 2. NO → Q439 | | | | | | | | | | | | | | | | | | | |
|--|---|--|--|-----|----|----------------|---|---|------------|---|---|----------------|---|---|----------------|---|---|-------------------|---|---|
| 434A. Now I would like to talk about the second twin, (NAME). Was (NAME) weighed at birth? | 1. YES 2. NO → Q434C 8. DOES NOT KNOW → Q434C | | | | | | | | | | | | | | | | | | | |
| 434B. How much did (NAME) weigh? | <p style="text-align: center;">____ • ____ KILOGRAMS-->GO TO Q435</p> 88. DON'T KNOW | | | | | | | | | | | | | | | | | | | |
| 434C. Do you know if (NAME) weighed less than 2.5 kg or was considered too small? | 1. YES, WAS LESS THAN 2.5 kg 2. NO, WAS MORE THAN 2.5 kg 8. DOESN'T KNOW / REMEMBER | | | | | | | | | | | | | | | | | | | |
| 435. Does (NAME) have a birth certificate? | 1. YES 2. NO 8. DOES NOT KNOW | | | | | | | | | | | | | | | | | | | |
| 436A. Did you ever breastfeed (NAME)? | 1. YES 2. NO → Q437A | | | | | | | | | | | | | | | | | | | |
| 436B. How long after birth did you first put (NAME) to the breast? | 000. WITHIN ONE HOUR <div style="display: flex; justify-content: space-around;"> <div>HOURS 1</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> </div> <div style="display: flex; justify-content: space-around;"> <div>DAYS 2</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> </div> 888. DO NOT REMEMBER | | | | | | | | | | | | | | | | | | | |
| 436C. CHECK 320: IS THE CHILD STILL LIVING? | 1. YES 2. NO → Q436G | | | | | | | | | | | | | | | | | | | |
| 436D. Are you still breastfeeding (NAME)? | 1. YES 2. NO → Q436G | | | | | | | | | | | | | | | | | | | |
| 436E. Now I would like to ask you about liquids or foods (NAME) had yesterday during the day or night. Did (NAME) drink/eat: (READ A-E. RECORD ALL MENTIONED.) A. Plain water? B. Commercially produced infant formula? C. Any [BRAND NAME OF COMMERCIALLY FORTIFIED BABY FOOD, E.G. Cerelac]? D. Any milk from animals? E. Any (other) porridge like ugali? | A. PLAIN WATER B. FORMULA C. BABY CEREAL D. ANIMAL MILK E. PORRIDGE/UGALI | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th><th style="width: 10%;">YES</th><th style="width: 10%;">NO</th></tr> </thead> <tbody> <tr><td>A. PLAIN WATER</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>B. FORMULA</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>C. BABY CEREAL</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>D. ANIMAL MILK</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr><td>E. PORRIDGE/UGALI</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> </tbody> </table> | | YES | NO | A. PLAIN WATER | 1 | 2 | B. FORMULA | 1 | 2 | C. BABY CEREAL | 1 | 2 | D. ANIMAL MILK | 1 | 2 | E. PORRIDGE/UGALI | 1 | 2 |
| | YES | NO | | | | | | | | | | | | | | | | | | |
| A. PLAIN WATER | 1 | 2 | | | | | | | | | | | | | | | | | | |
| B. FORMULA | 1 | 2 | | | | | | | | | | | | | | | | | | |
| C. BABY CEREAL | 1 | 2 | | | | | | | | | | | | | | | | | | |
| D. ANIMAL MILK | 1 | 2 | | | | | | | | | | | | | | | | | | |
| E. PORRIDGE/UGALI | 1 | 2 | | | | | | | | | | | | | | | | | | |
| CHECK Q436E: IF THE CHILD HAD ANY OF THE FOOD/DRINK LISTED (ANY 'YES' RESPONSES) SKIP TO Q437A. IF THE CHILD DID NOT HAVE ANY OF THE FOOD/DRINK (ALL 'NO' RESPONSES), CONTINUE. | | | | | | | | | | | | | | | | | | | | |
| 436F. Aside from breastmilk, did (NAME) have anything at all to eat or drink yesterday or last night? RECORD RESPONSE. THEN GO TO Q437A. | 1. YES → Q437A 2. NO → Q437A 8. DOES NOT KNOW → Q437A | | | | | | | | | | | | | | | | | | | |
| 436G. For how many months did you breastfeed (NAME)? | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center;"> </div> <div style="margin-left: 5px;">MONTHS</div> </div> 88. DO NOT REMEMBER | | | | | | | | | | | | | | | | | | | |
| 437A. In the two months after (NAME) was born, did any health care provider or traditional birth attendant check on his/her health? | 1. YES 2. NO ----->GO TO Q439 3. NO, BABY DIED ----->GO TO Q439 8. DOES NOT REMEMBER-->GO TO Q439 | | | | | | | | | | | | | | | | | | | |
| 437B. How many days or weeks after (NAME's) birth did the first health check take place? | 1. ____ DAYS OR 2. ____ WEEKS 000. SAME DAY 888. DO NOT REMEMBER | | | | | | | | | | | | | | | | | | | |
| 438. Was the health check because (NAME) was sick or was it a routine health exam? | 1. HEALTH CHECK FOR SICKNESS 2. ROUTINE HEALTH CHECK 8. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | |

**SECTION IV: HEALTH CARE FOR BIRTHS SINCE JANUARY 2009
NEXT-TO-LAST BIRTH**

| | | |
|--------------|--|--|
| 439. | DID THE NEXT-TO-LAST BIRTH OCCUR SINCE JANUARY 2009 (SEE Q315)? | 1. YES 2. NO → GO TO SECTION V 3. ONLY ONE BIRTH → GO TO SECTION V |
| 440. | COPY THE PREGNANCY NUMBER AND OUTCOME OF THE NEXT-TO-LAST BIRTH SINCE 2009 ON PAGE 5. | PREGNANCY # <input style="width: 40px;" type="text"/> PREGNANCY OUTCOME CODE: "1", "2", "3", "4, or "5" <input style="width: 40px;" type="text"/> IF CODE= 1, 2, or 3, RECORD: NAME: _____ STILL ALIVE? (Q320=1) 1. YES 2. NO |
| 441. | Now, I would like to talk to you about your next-to-last birth. Just before you got pregnant, did you want to get pregnant then, did you want to get pregnant later, or did you not want to get pregnant then or any time in the future? | 1. WANTED THE PREGNANCY THEN 2. WANTED THE PREGNANCY LATER 3. DID NOT WANT THE PREGNANCY 8. NOT SURE |
| 442. | Did you see anyone for antenatal care during that pregnancy? | 1. YES → Q443 2. NO |
| 442A. | Why didn't you go for antenatal care? PROBE: Any other reason? RECORD ALL MENTIONED, THEN GO TO Q446 | A. COST TOO MUCH B. FACILITY FAR AWAY C. TRANSPORTATION UNAVAILABLE/EXPENSIVE D. DON'T TRUST FACILITY/POOR QUALITY SERVICE E. NO FEMALE PROVIDER AT FACILITY F. HUSBAND/FAMILY DID NOT ALLOW G. NOT NECESSARY H. NOT CUSTOMARY I. OTHER _____ GO TO Q446 |
| 443. | Where did you go for antenatal care? RECORD ALL MENTIONED | A. HOSPITAL _____ (SPECIFY) B. HEALTH CENTER _____ (SPECIFY) C. DISPENSARY D. HOME E. CBD WORKER F. COMMUNITY HEALTH WORKER (CHW) G. TRAINED BIRTH ATTENDANT H. OTHER _____ (SPECIFY) |
| 444. | How many times did you go? | <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> TIMES 77 NOT SURE 88 DOES NOT REMEMBER |
| 445. | In what month of the pregnancy did the antenatal care begin? | <input style="width: 30px;" type="text"/> <input style="width: 30px;" type="text"/> MONTH 88 DOES NOT REMEMBER |
| 446. | Where did you give birth to the baby? KIGOMA HOSPITAL CODES: MAWENI: A KASULU: B KIBONDO: C KABANGA: D HERI ADVENTIST: E BAPTIST: F | 1. KIGOMA HOSPITAL: CODE _____ 2. OTHER HOSPITAL: _____ (SPECIFY) 3. HEALTH CENTER _____ (SPECIFY) 4. DISPENSARY: _____ (SPECIFY) 5. ON THE WAY TO A HEALTH FACILITY 6. YOUR HOME → Q449 7. OTHER HOME → Q449 8. OTHER _____ (SPECIFY) → Q449 |

| | |
|--|--|
| 446A. Were you referred? | 1. YES 2. NO INTERVIEWER: IF Q446=5, GO TO Q450 |
| 447A. How long did it take you, one-way, to get from your home to the health facility where you delivered? | 1. ____ MINUTES OR 2. ____ HOURS 88. DON'T REMEMBER |
| 447B. How did you get to the health facility? PROBE: Any other way? RECORD ALL MENTIONED | A. WALKED / ON FOOT B. BICYCLE C. MOTORCYCLE D. CAR / TRUCK E. BOAT F. OTHER (SPECIFY) |
| 448. Was the baby delivered by caesarean section; that is, did they cut your belly open to take the baby out? RECORD RESPONSE. THEN GO TO Q450. | 1. YES → Q450 2. NO → Q450 |
| 449. Why did you decide to not deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED | A. COST TOO MUCH TO DELIVER AT FACILITY B. FACILITY NOT OPEN C. FACILITY FAR AWAY D. TRANSPORTATION UNAVAILABLE E. TRANSPORTATION EXPENSIVE F. DON'T TRUST FACILITY G. EXPECT POOR QUALITY SERVICE/CARE H. FEAR OF ABUSE/DISRESPECT AT FACILITY I. LACK OF ALTERNATIVE CARE FOR FAMILY J. NO ACCOMMODATIONS NEAR FACILITY K. NO FEMALE PROVIDER AT FACILITY L. BABY CAME EARLIER THAN EXPECTED M. HUSBAND/FAMILY DID NOT ALLOW N. NOT NECESSARY O. NOT CUSTOMARY P. OTHER (SPECIFY) |
| 450. Who assisted with the delivery? PROBE: Anyone else? RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT DELIVERY. | A. DOCTOR / ASSISTANT MEDICAL OFFICER B. CLINICAL OFFICER C. ASSISTANT CLINICAL OFFICER D. TRAINED NURSE / MIDWIFE E. MCH AIDE F. MEDICAL ATTENDANT G. NURSE ASSISTANT H. VILLAGE HEALTH WORKER I. TBA J. RELATIVE/FRIEND K. OTHER (SPECIFY) L. NO ONE M. DOESN'T KNOW |
| 451A. REVIEW 446: IF DELIVERY OCCURRED IN A FACILITY (446=1-4), ASK: After you left the facility, did any health care provider or a traditional birth attendant check on your health? IF DELIVERY OCCURRED OUTSIDE A FACILITY (446=5-8), ASK: After the baby was born, did any health care provider or a traditional birth attendant check on your health? | 1. YES 2. NO → Q452 8. DOES NOT REMEMBER → Q452 |
| 451B. How long after delivery did the first check take place? INTERVIEWER: IF 'SAME DAY', PROBE TO BE SURE THE CHECK OCCURRED DURING A SEPARATE VISIT. | 1. ____ DAYS 2. ____ WEEKS 000. SAME DAY 888. DON'T REMEMBER |
| 451C. Where did the first check take place? | 1. HOSPITAL (SPECIFY) 2. HEALTH CENTER (SPECIFY) 3. DISPENSARY 4. HOME 5. CBD WORKER 6. OTHER (SPECIFY) |

SECTION IV: HEALTH CARE FOR BIRTHS SINCE JANUARY 2009
THIRD-TO-LAST BIRTH

| | | | |
|---|--|--|---|
| 452. DID THE THIRD-TO-LAST BIRTH OCCUR SINCE JANUARY 2009 (SEE Q315)? | 1. YES 2. NO → GO TO SECTION V 3. ONLY TWO BIRTHS → GO TO SECTION V | | |
| 453. COPY THE PREGNANCY NUMBER AND OUTCOME OF THE THIRD-TO-LAST BIRTH SINCE 2009 ON PAGE 5. | PREGNANCY # <input type="text"/> PREGNANCY OUTCOME CODE: "1", "2", "3", "4, or "5" <input type="text"/> IF CODE= 1, 2, or 3, RECORD: NAME: _____ STILL ALIVE? (Q320=1) 1. YES 2. NO | | |
| 454. Now, I would like to talk to you about your THIRD-to-last birth. <u>Just before you got pregnant</u> , did you want to get pregnant then, did you want to get pregnant later, or did you not want to get pregnant then or any time in the future? | 1. WANTED THE PREGNANCY THEN 2. WANTED THE PREGNANCY LATER 3. DID NOT WANT THE PREGNANCY 8. NOT SURE | | |
| 456. Did you see anyone for antenatal care during that pregnancy? | 1. YES → Q457 2. NO | | |
| 456A. Why didn't you go for antenatal care? PROBE: Any other reason? RECORD ALL MENTIONED, THEN GO TO Q460. | A. COST TOO MUCH B. FACILITY FAR AWAY C. TRANSPORTATION UNAVAILABLE/EXPENSIVE D. DON'T TRUST FACILITY/POOR QUALITY SERVICE E. NO FEMALE PROVIDER AT FACILITY F. HUSBAND/FAMILY DID NOT ALLOW G. NOT NECESSARY H. NOT CUSTOMARY I. OTHER _____ GO TO Q460. | | |
| 457. Where did you go for antenatal care? RECORD ALL MENTIONED | A. HOSPITAL _____ (SPECIFY) B. HEALTH CENTER _____ (SPECIFY) C. DISPENSARY D. HOME E. CBD WORKER F. COMMUNITY HEALTH WORKER (CHW) G. TRAINED BIRTH ATTENDANT H. OTHER _____ (SPECIFY) | | |
| 458. How many times did you go? | <input type="text"/> <input type="text"/> TIMES 77 NOT SURE 88 DOES NOT REMEMBER | | |
| 459. In what month of the pregnancy did the antenatal care begin? | <input type="text"/> <input type="text"/> MONTH 88 DOES NOT REMEMBER | | |
| 460. Where did you give birth? | <table border="0"> <tr> <td style="vertical-align: top;"> KIGOMA HOSPITAL CODES: MAWENI: A KASULU: B KIBONDO: C KABANGA: D HERI ADVENTIST: E BAPTIST: F </td> <td style="vertical-align: top;"> 1. KIGOMA HOSPITAL: CODE _____ 2. OTHER HOSPITAL: _____ (SPECIFY) 3. HEALTH CENTER _____ (SPECIFY) 4. DISPENSARY: _____ (SPECIFY) 5. ON THE WAY TO A HEALTH FACILITY 6. YOUR HOME → Q463 7. OTHER HOME → Q463 8. OTHER _____ (SPECIFY) → Q463 </td> </tr> </table> | KIGOMA HOSPITAL CODES: MAWENI: A KASULU: B KIBONDO: C KABANGA: D HERI ADVENTIST: E BAPTIST: F | 1. KIGOMA HOSPITAL: CODE _____ 2. OTHER HOSPITAL: _____ (SPECIFY) 3. HEALTH CENTER _____ (SPECIFY) 4. DISPENSARY: _____ (SPECIFY) 5. ON THE WAY TO A HEALTH FACILITY 6. YOUR HOME → Q463 7. OTHER HOME → Q463 8. OTHER _____ (SPECIFY) → Q463 |
| KIGOMA HOSPITAL CODES: MAWENI: A KASULU: B KIBONDO: C KABANGA: D HERI ADVENTIST: E BAPTIST: F | 1. KIGOMA HOSPITAL: CODE _____ 2. OTHER HOSPITAL: _____ (SPECIFY) 3. HEALTH CENTER _____ (SPECIFY) 4. DISPENSARY: _____ (SPECIFY) 5. ON THE WAY TO A HEALTH FACILITY 6. YOUR HOME → Q463 7. OTHER HOME → Q463 8. OTHER _____ (SPECIFY) → Q463 | | |

| | |
|---|--|
| 460A. Were you referred? | 1. YES 2. NO INTERVIEWER: IF Q460=5, GO TO Q464 |
| 461A. How long did it take you, one-way, to get from your home to the health facility where you delivered? | 1. ____ MINUTES OR 2. ____ HOURS 888. DON'T REMEMBER |
| 461B. How did you get to the health facility? PROBE: Any other way? RECORD ALL MENTIONED | A. WALKED / ON FOOT B. BICYCLE C. MOTORCYCLE D. CAR / TRUCK E. BOAT F. OTHER (SPECIFY) |
| 462. Was the baby delivered by caesarean section; that is, did they cut your belly open to take the baby out? RECORD RESPONSE. THEN GO TO Q464. | 1. YES → Q464 2. NO → Q464 |
| 463. Why did you decide to not deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED | A. COST TOO MUCH TO DELIVER AT FACILITY B. FACILITY NOT OPEN C. FACILITY FAR AWAY D. TRANSPORTATION UNAVAILABLE E. TRANSPORTATION EXPENSIVE F. DON'T TRUST FACILITY G. EXPECT POOR QUALITY SERVICE/CARE H. FEAR OF ABUSE/DISRESPECT AT FACILITY I. LACK OF ALTERNATIVE CARE FOR FAMILY J. NO ACCOMMODATIONS NEAR FACILITY K. NO FEMALE PROVIDER AT FACILITY L. BABY CAME EARLIER THAN EXPECTED M. HUSBAND/FAMILY DID NOT ALLOW N. NOT NECESSARY O. NOT CUSTOMARY P. OTHER (SPECIFY) |
| 464. Who assisted with the delivery? PROBE: Anyone else? RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT DELIVERY. | A. DOCTOR / ASSISTANT MEDICAL OFFICER B. CLINICAL OFFICER C. ASSISTANT CLINICAL OFFICER D. TRAINED NURSE / MIDWIFE E. MCH AIDE F. MEDICAL ATTENDANT G. NURSE ASSISTANT H. VILLAGE HEALTH WORKER I. TBA J. RELATIVE/FRIEND K. OTHER (SPECIFY) L. NO ONE M. DOESN'T KNOW |
| 465A. REVIEW 460: IF DELIVERY OCCURRED IN A FACILITY (460=1-4), ASK: After you left the facility, did any health care provider or a traditional birth attendant check on your health? IF DELIVERY OCCURRED OUTSIDE A FACILITY (460=5-8), ASK: After the baby was born, did any health care provider or a traditional birth attendant check on your health? | 1. YES 2. NO → GO TO SECTION V 8. DOES NOT REMEMBER → GO TO SECTION V |
| 465B. How long after delivery did the first check take place? INTERVIEWER: IF 'SAME DAY', PROBE TO BE SURE THE CHECK OCCURRED DURING A SEPARATE VISIT. | 1. ____ DAYS 2. ____ WEEKS 000. SAME DAY 888. DON'T REMEMBER |
| 465C. Where did the first check take place? | 1. HOSPITAL (SPECIFY) 2. HEALTH CENTER (SPECIFY) 3. DISPENSARY 4. HOME 5. CBD WORKER 6. OTHER (SPECIFY) |

SECTION V– CONTRACEPTIVE KNOWLEDGE AND USE

| | | | |
|--|--|---|---|
| Now I am going to ask you some questions about Family Planning; this is about methods that couples use to delay or avoid pregnancy. | | | |
| READ THE NAME OF EACH METHOD AND CIRCLE "1" OR "2" IN Q501, AS APPROPRIATE. ONLY ASK 502 IF 501=1 (YES) | | 501. Have you heard of (METHOD)? | 502. Have you ever used (METHOD)? |
| METHOD: | | YES NO | YES NO |
| A. Female sterilization, tubal ligation PROBE: Women can have an operation to avoid having more children. | | 1 2 | 1 2 |
| B. Male sterilization, vasectomy PROBE: Men can have an operation to avoid having more children. | | 1 2 | 1 2 |
| C. IUD PROBE: Women can have a loop or coil placed inside them by a doctor or nurse. | | 1 2 | 1 2 |
| D. Injectables PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. | | 1 2 | 1 2 |
| E. Implants (e.g. Implanon, Nexplanon, Jadelle, Norplant) PROBE: Women can have several small rods placed in their upper arm by a doctor or nurse, which can prevent pregnancy for one or more months. | | 1 2 | 1 2 |
| F. Pill PROBE: Women can take a pill every day to avoid becoming pregnant. | | 1 2 | 1 2 |
| G. Male Condom PROBE: Men can put a rubber sheath on their penis before sexual intercourse. | | 1 2 | 1 2 |
| H. Female Condom PROBE: Women can place a sheath in their vagina before sexual intercourse. | | 1 2 | 1 2 |
| I. Diaphragm PROBE: Women can place a shallow cup in their vagina before sexual intercourse. | | 1 2 | 1 2 |
| J. Foam or Jelly PROBE: Women can place a suppository, jelly or cream in their vagina before sexual intercourse. | | 1 2 | 1 2 |
| K. Lactational Amenorrhea Method (LAM) | | 1 2 | 1 2 |
| L. Rhythm PROBE: Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. | | 1 2 | 1 2 |
| M. Withdrawal PROBE: Men can be careful and pull out before climax. | | 1 2 | 1 2 |
| N. Emergency Contraception PROBE: As an emergency measure after unprotected intercourse, women can take special pills at any time within five days to prevent pregnancy. | | 1 2 | 1 2 |
| O. Have you heard of any other ways or methods that women or men can use to avoid pregnancy? (SPECIFY) _____ _____ _____ | | 1 2 | 1 2 |

| | |
|--|--|
| 503A. In the last 12 months, were you visited by a community health worker or facility outreach worker who talked to you about family planning? | 1. YES, COMMUNITY HEALTH WORKER 2. YES, FACILITY OUTREACH WORKER 3. YES, BOTH 4. NO 8. NOT SURE |
| 503B. In the last 12 months, have you visited a health facility for care for yourself or your children? | 1. YES 2. NO → Q504F 8. NOT SURE → Q504F |
| 503C. Did any staff member at the health facility speak to you about family planning? | 1. YES 2. NO 8. NOT SURE |
| 504F. INTERVIEWER, CHECK QUESTION Q502. HAS RESPONDENT EVER USED AT LEAST ONE METHOD OF CONTRACEPTION (AT LEAST ONE "1" CIRCLED IN Q502)? | 1. EVER USED METHODS (AT LEAST ONE "1" IN Q502A—N) 2. NEVER USED A CONTRACEPTIVE METHOD → Q539 |
| 505. How old were you when you first used contraception? | <input type="text"/> <input type="text"/> YEARS 88. DOES NOT REMEMBER |
| 506. How many living children did you have when you first used contraception? | <input type="text"/> <input type="text"/> CHILDREN 00. NO LIVING CHILDREN 88. DOES NOT REMEMBER |
| 507. Are you currently (last 30 days) doing something or using any method to delay or avoid getting pregnant? | 1. YES 2. NO → Q530 8. NOT SURE → Q530 |
| 508. Which method are you using? CIRCLE ALL MENTIONED IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST. | A. FEMALE STERILIZATION, TUBAL LIGATION → Q512 B. MALE STERILIZATION, VASECTOMY → Q512 C. IUD → Q514 D. INJECTABLES → Q509 E. IMPLANT → Q510 F. PILL → Q511 G. MALE CONDOM H. FEMALE CONDOM I. DIAPHRAGM J. FOAM/JELLY K. LAM → Q514 L. RHYTHM M. WITHDRAWAL X. OTHER MODERN METHOD: (SPECIFY) _____ Y. OTHER TRADITIONAL METHOD: (SPECIFY) _____ |
| 509. What is the brand name of the injectables you are using? | 1. THREE MONTH (DEPO PROVERA) 2. OTHER (SPECIFY): _____ } → Q514 8. DON'T KNOW / NOT SURE |
| 510. What is the brand name of the implant you are using? | 1. THREE YEARS (IMPLANON) 2. FIVE YEARS (JADELLE) 3. OTHER (SPECIFY): _____ } → Q514 8. DON'T KNOW |

| 511. What is the brand name of the pills you are using? IF DON'T KNOW, ASK TO SEE PACKAGE | 1. MICROGYNON 2. LO FEMANAL 3. SAFE PLAN 4. MACROVAL 5. MICROLUT 6. FAMILIA 7. OTHER (SPECIFY): _____ 8. DON'T KNOW / NOT SURE | → Q514 | | | | | | | | | | | | | | | | | | |
|---|---|----------------|--|------------|-----------|------------------|---|---|-----------------|---|---|--------------------|---|---|-------------------|---|---|-------------|---|---|
| 512. In what facility did the sterilization take place? | 1. HOSPITAL _____ (SPECIFY) 2. HEALTH CENTER _____ (SPECIFY) 3. OTHER _____ (SPECIFY) 8. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | |
| 513. In what month and year was the sterilization performed? | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">88</div> <div style="border-bottom: 1px solid black; width: 30px; margin-right: 5px;">DNR</div> <div style="margin-right: 10px;">MONTH</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">8888</div> <div style="border-bottom: 1px solid black; width: 30px; margin-right: 5px;">DNR</div> <div>YEAR</div> </div> | → Q533 | | | | | | | | | | | | | | | | | | |
| 514. In what month and year did you start using (CURRENT METHOD IN Q508) continuously (without stopping)? (IF NEEDED, PROBE USING THE PREGNANCY HISTORY: "How long after your last birth did you start using your current method continuously?") | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">88</div> <div style="border-bottom: 1px solid black; width: 30px; margin-right: 5px;">DNR</div> <div style="margin-right: 10px;">MONTH</div> <div style="border: 1px solid black; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin-right: 5px;">8888</div> <div style="border-bottom: 1px solid black; width: 30px; margin-right: 5px;">DNR</div> <div>YEAR</div> </div> | | | | | | | | | | | | | | | | | | | |
| 515F. INTERVIEWER: REVIEW Q508. IF LAM (K), RHYTHM (L), WITHDRAWAL (M) OR OTHER TRADITIONAL (Y) IS THE HIGHEST RANKED METHOD → SKIP TO 524. | | | | | | | | | | | | | | | | | | | | |
| 515G. Where do you (or your partner) obtain the contraceptive method you are currently using as a couple? (IF MULTIPLE PLACES RECORD THE MAIN SOURCE) | 1. GOVERNMENT HOSPITAL _____ (SPECIFY) 2. GOVERNMENT HEALTH CENTER _____ (SPECIFY) 3. GOVERNMENT DISPENSARY _____ (SPECIFY) 4. RELIGIOUS/PRIVATE HEALTH FACILITY 5. PHARMACY 6. NGO 7. VCT CENTER 8. CBD/ VILLAGE HEALTH WORKER 9. FAMILY/FRIEND/NEIGHBOR 10. MARKET/SHOP/BAR 11. OTHER (SPECIFY) _____ 88. DOES NOT REMEMBER | → Q521A | | | | | | | | | | | | | | | | | | |
| 516. Who gets the supplies? You, your partner, or both? | 1. HERSELF 2. HER PARTNER 3. BOTH 8. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | |
| 517. Can you get family planning services there at any time or do they only offer family planning services at special times during the day or on certain days? | 1. CAN GET FAMILY PLANNING SERVICES AT ANY TIME → Q521A 2. CAN ONLY GET FAMILY PLANNING SERVICES AT CERTAIN TIMES/DAYS 8. DOES NOT KNOW/NOT SURE | | | | | | | | | | | | | | | | | | | |
| 518. Are the special times or days convenient for you? | 1. YES → Q521A 2. NO 8. NOT SURE | | | | | | | | | | | | | | | | | | | |
| 519. What time of day is convenient for you to get family planning services? (READ A-E). A. Early Morning (Until 10.00AM) B. Late morning (10.00AM-Noon) C. Early Afternoon (12.00PM-3PM) D. Late Afternoon (3.00PM-6.00PM) E. Evenings (6.00PM or Later) | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>YES</u></th> <th style="text-align: center;"><u>NO</u></th> </tr> </thead> <tbody> <tr> <td>A. EARLY MORNING</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>B. LATE MORNING</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>C. EARLY AFTERNOON</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>D. LATE AFTERNOON</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>E. EVENINGS</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table> | | | <u>YES</u> | <u>NO</u> | A. EARLY MORNING | 1 | 2 | B. LATE MORNING | 1 | 2 | C. EARLY AFTERNOON | 1 | 2 | D. LATE AFTERNOON | 1 | 2 | E. EVENINGS | 1 | 2 |
| | <u>YES</u> | <u>NO</u> | | | | | | | | | | | | | | | | | | |
| A. EARLY MORNING | 1 | 2 | | | | | | | | | | | | | | | | | | |
| B. LATE MORNING | 1 | 2 | | | | | | | | | | | | | | | | | | |
| C. EARLY AFTERNOON | 1 | 2 | | | | | | | | | | | | | | | | | | |
| D. LATE AFTERNOON | 1 | 2 | | | | | | | | | | | | | | | | | | |
| E. EVENINGS | 1 | 2 | | | | | | | | | | | | | | | | | | |

| 520. Which <u>day, or days of the week</u> are convenient for you? CIRCLE ALL MENTIONED | <table border="1"> <thead> <tr> <th></th> <th>MENTIONED</th> <th>NOT MENTIONED</th> </tr> </thead> <tbody> <tr> <td>A. MONDAY</td> <td>1</td> <td>2</td> </tr> <tr> <td>B. TUESDAY</td> <td>1</td> <td>2</td> </tr> <tr> <td>C. WEDNESDAY</td> <td>1</td> <td>2</td> </tr> <tr> <td>D. THURSDAY</td> <td>1</td> <td>2</td> </tr> <tr> <td>E. FRIDAY</td> <td>1</td> <td>2</td> </tr> <tr> <td>F. SATURDAY</td> <td>1</td> <td>2</td> </tr> <tr> <td>G. SUNDAY</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | MENTIONED | NOT MENTIONED | A. MONDAY | 1 | 2 | B. TUESDAY | 1 | 2 | C. WEDNESDAY | 1 | 2 | D. THURSDAY | 1 | 2 | E. FRIDAY | 1 | 2 | F. SATURDAY | 1 | 2 | G. SUNDAY | 1 | 2 |
|---|--|---------------|-----------|---------------|-----------|---|---|------------|---|---|--------------|---|---|-------------|---|---|-----------|---|---|-------------|---|---|-----------|---|---|
| | MENTIONED | NOT MENTIONED | | | | | | | | | | | | | | | | | | | | | | | |
| A. MONDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| B. TUESDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| C. WEDNESDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| D. THURSDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| E. FRIDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| F. SATURDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| G. SUNDAY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | |
| 521A. You obtained (CURRENT METHOD FROM 508) from (SOURCE OF METHOD IN 515G) in (DATE FROM 514). At that time, were you told about side effects or problems you might have with the method? | 1. YES → Q521C 2. NO 8. NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | |
| 521B. Were you ever told by a health or family planning worker about side effects or problems you might have with the method? | 1. YES 2. NO → Q522A 8. NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | |
| 521C. Were you told what to do if you experienced side effects or problems? | 1. YES 2. NO 8. NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | |
| 522A. Do you think the <u>waiting time</u> where you get the method is too long or not too long? | 1. TOO LONG 2. NOT TOO LONG 8. DOES NOT KNOW/NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | |
| 522B. How long does it take you to <u>get to the place</u> where you or your partner gets the contraceptive supplies? | 1. LESS THAN 30 MIN 2. 30-59 MINUTES 3. 1-2 HOURS 4. 2-3 HOURS 5. MORE THAN 3 HOURS 6. SUPPLIES OFFERED AT HOME OR WORK PLACE 7. OTHER _____ 8. DOES NOT KNOW / NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | |
| 523. Do you or your partner pay for the contraceptive method you now use? | 1. YES 2. NO 8. NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | |
| 524. Would you prefer to use a different method of family planning from the one you are currently using? | 1. YES 2. NO → Q533 8. NOT SURE → Q533 | | | | | | | | | | | | | | | | | | | | | | | | |
| 525. What method would you prefer to use? (OTHER THAN THE METHOD SPECIFIED IN Q508) | 1. FEMALE STERILIZATION, TUBAL LIGATION 2. MALE STERILIZATION, VASECTOMY 3. IUD 4. INJECTABLES 5. IMPLANT 6. PILL 7. MALE CONDOM 8. FEMALE CONDOM 9. DIAPHRAGM 10. FOAM/JELLY 11. LAM 12. RHYTHM 13. WITHDRAWAL 14. OTHER MODERN METHOD _____(SPECIFY) 15. OTHER TRADITIONAL METHOD: _____(SPECIFY) | | | | | | | | | | | | | | | | | | | | | | | | |
| 526. Do you know where to obtain this method? (OR INFORMATION ABOUT A TRADITIONAL METHOD IF IT IS RHYTHM OR WITHDRAWAL.) | 1. YES 2. NO → Q529 8. NOT SURE → Q529 | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---|--|
| 527. Where can you obtain this preferred method? (OR INFORMATION ABOUT A TRADITIONAL METHOD.) | 1. GOVERNMENT HOSPITAL _____ (SPECIFY) 2. GOVERNMENT HEALTH CENTER _____ (SPECIFY) 3. GOVERNMENT DISPENSARY _____ (SPECIFY) 4. RELIGIOUS/PRIVATE HEALTH FACILITY _____ 5. PHARMACY 6. NGO 7. VCT CENTER 8. CBD/ VILLAGE HEALTH WORKER 9. FRIEND/NEIGHBOR 10. MARKET/SHOP/BAR 11. OTHER _____ (SPECIFY) 88. DOES NOT REMEMBER |
| 528. How much time would you or your partner have to travel to obtain the supplies or information about the method? | 1. LESS THAN 30 MIN 2. 30-59 MINUTES 3. 1-2 HOURS 4. 2-3 HOURS 5. MORE THAN 3 HOURS 6. SUPPLIES OFFERED AT HOME OR WORK PLACE 7. OTHER _____ 8. DOES NOT KNOW / NOT SURE |
| 529. What is the most important reason why you do not use the preferred method? | 1. DOCTOR WILL NOT PRESCRIBE IT 2. COST 3. NOT AVAILABLE/DIFFICULT ACCES/UNRELIABLE SOURCE 4. SOURCE TOO FAR AWAY 5. DO NOT KNOW HOW/WHERE TO OBTAIN IT 6. HUSBAND/PARTNER OBJECTS TO IT 7. RELIGIOUS REASONS 8. FEAR OF SIDE EFFECTS 9. STILL THINKING ABOUT IT/HAS NOT MADE UP HER MIND 10. DIFFICULT TO USE 11. FEAR OF SURGERY (IUD, TUBAL LIGATION, IMPLANT) 12. OTHER _____ 88. DON'T KNOW |
| 530. What was the last contraceptive method you or your partner had used? | 1. FEMALE STERILIZATION, TUBAL LIGATION 2. MALE STERILIZATION, VASECTOMY 3. IUD 4. INJECTABLES 5. IMPLANT 6. PILL 7. MALE CONDOM 8. FEMALE CONDOM 9. DIAPHRAGM 10. FOAM/JELLY 11. LACTATIONAL AMENHORREA 12. RHYTHM 13. WITHDRAWAL 14. OTHER MODERN METHOD _____ (SPECIFY) 15. OTHER TRADITIONAL METHOD: _____ (SPECIFY) |
| 531. In what month and year did you stop using (LAST METHOD IN Q530)? RECORD LAST MONTH OF USE | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="margin-right: 10px;">MONTH</div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-right: 5px;"></div> <div>YEAR</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> 88 DR MONTH 8888 DR YEAR </div> |
| 532. REVIEW Q530: IF LAM, RHYTHM, OR WITHDRAWAL (Q530=11, 12, OR 13), THEN FOR Q532 YOU SHOULD CIRCLE RESPONSE 11. (NON-SUPPLY METHOD: DOES NOT APPLY.) OTHERWISE, ASK: Where did you obtain that method? | 1. GOVERNMENT HOSPITAL _____ (SPECIFY) 2. GOVERNMENT HEALTH CENTER _____ (SPECIFY) 3. GOVERNMENT DISPENSARY _____ (SPECIFY) 4. RELIGIOUS/PRIVATE HEALTH FACILITY _____ 5. PHARMACY 6. NGO 7. VCT CENTER 8. CBD/ VILLAGE HEALTH WORKER 9. FAMILY/FRIEND/NEIGHBOR 10. MARKET/SHOP/BAR 11. NON-SUPPLY METHOD: DOES NOT APPLY 88. DOES NOT REMEMBER |
| 533. Now, I would like to ask you some questions on your pregnancies and family planning history during the last few years. First, I will verify with you the pregnancies you may have had since January 2009. REFER TO THE PREGNANCY HISTORY (Q315-317) AND COMPLETE COLUMN 1 IN THE PREGNANCY AND CONTRACEPTIVE USE CALENDAR ON THE NEXT PAGE. | |
| 534F. CHECK Q513, Q514 AND Q531 TO RECORD IF RESPONDENT HAD USED ANY CONTRACEPTIVE METHOD SINCE JANUARY 2009 | 1. HAD USED CONTRACEPTION IN YEAR 2009 OR LATER 2. HAD NEVER USED CONTRACEPTION OR HAD USED IT BEFORE JAN. 2009 → COMPLETE COLUMN 2 WITH "0"; LEAVE COLUMN 3 BLANK |

COMPLETE THE REST OF THE CONTRACEPTIVE CALENDAR FOR THOSE WHO HAVE USED CONTRACEPTION SINCE JANUARY 2009

535.. USE CALENDAR TO PROBE FOR PERIODS OF USE AND NONUSE, STARTING WITH EARLIEST USE, BEGINNING WITH JANUARY 2009. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.

IN COLUMN 2, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS:

- When was the last time you used a method? Which method was that?
- When did you start using that method? How long after the birth of (NAME)?
- How long did you use the method then?

IN COLUMN 3, ENTER CODES FOR DISCONTINUATION ONE MONTH AFTER THE LAST MONTH OF USE. ILLUSTRATIVE QUESTIONS:

- Why did you stop using the (METHOD)?
- Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?

| COLUMN 1 (PREGNANCY OUTCOME) | DATE | 1 | 2 | 3 | DATE | 1 | 2 | 3 |
|--|-------------|---|---|---|-------------|---|---|---|
| 0. PREGNANT THAT MONTH | 2009 | | | | 2012 | | | |
| 1. LIVE BIRTH | 1 Jan | | | | 1 Jan | | | |
| 2. MULTIPLE LIVE BIRTHS | 2 Feb | | | | 2 Feb | | | |
| 3. MULTIPLE (LIVE BIRTH WITH STILLBIRTH) | 3 Mar | | | | 3 Mar | | | |
| 4. STILLBIRTH (SINGLE) | 4 Apr | | | | 4 Apr | | | |
| 5. MULTIPLE STILLBIRTH | 5 May | | | | 5 May | | | |
| 6. MISCARRIAGE / ABORTION | 6 Jun | | | | 6 Jun | | | |
| 7. ECTOPIC | 7 Jul | | | | 7 Jul | | | |
| COLUMN 2 (METHOD USED) | 8 Aug | | | | 8 Aug | | | |
| 0. NO METHOD | 9 Sep | | | | 9 Sep | | | |
| 1. FEMALE STERILIZATION, TUBAL LIGATION | 10 Oct | | | | 10 Oct | | | |
| 2. MALE STERILIZATION, VASECTOMY | 11 Nov | | | | 11 Nov | | | |
| 3. IUD | 12 Dec | | | | 12 Dec | | | |
| 4. INJECTABLES | 2010 | | | | 2013 | | | |
| 5. IMPLANTS | 1 Jan | | | | 1 Jan | | | |
| 6. PILL | 2 Feb | | | | 2 Feb | | | |
| 7. CONDOM | 3 Mar | | | | 3 Mar | | | |
| 8. FEMALE CONDOM | 4 Apr | | | | 4 Apr | | | |
| 9. DIAPHRAGM | 5 May | | | | 5 May | | | |
| 10. FOAM/JELLY _____ | 6 Jun | | | | 6 Jun | | | |
| 11. LACTATIONAL AMENORRHEA METHOD | 7 Jul | | | | 7 Jul | | | |
| 12. RHYTHM METHOD | 8 Aug | | | | 8 Aug | | | |
| 13. WITHDRAWAL | 9 Sep | | | | 9 Sep | | | |
| 14. OTHER MODERN | 10 Oct | | | | 10 Oct | | | |
| 15. OTHER TRADITIONAL | 11 Nov | | | | 11 Nov | | | |
| 88. DOES NOT REMEMBER | 12 Dec | | | | 12 Dec | | | |
| COLUMN 3 (MAIN REASON THE USE WAS STOPPED) | 2011 | | | | 2014 | | | |
| 1. GOT PREGNANT WHILE USING | 1 Jan | | | | 1 Jan | | | |
| 2. WANTED TO GET PREGNANT | 2 Feb | | | | 2 Feb | | | |
| 3. HUSBAND OBJECTED | 3 Mar | | | | 3 Mar | | | |
| 4. SIDE EFFECTS | 4 Apr | | | | 4 Apr | | | |
| 5. HEALTH CONCERNS | 5 May | | | | 5 May | | | |
| 6. STOPPED TO "REST THE BODY" | 6 Jun | | | | 6 Jun | | | |
| 7. PHYSICIAN DECISION | 7 Jul | | | | 7 Jul | | | |
| 8. SUPPLY/AVAILABILITY | 8 Aug | | | | 8 Aug | | | |
| 9. DIFFICULT/INCONVENIENT TO USE | 9 Sep | | | | 9 Sep | | | |
| 10. MARRIAGE/RELATIONSHIP ENDED | 10 Oct | | | | 10 Oct | | | |
| 11. WANTED TO TRY OTHER METHOD | 11 Nov | | | | 11 Nov | | | |
| 12. SPORADIC SEXUAL ACTIVITY | 12 Dec | | | | 12 Dec | | | |
| 13. NOT SEXUALLY ACTIVE | | | | | | | | |
| 14. NO LONGER ABLE TO GET PREGNANT | | | | | | | | |
| 15. PERIOD RETURNED (LAM) | | | | | | | | |
| 16. OTHER(SPECIFY) _____ 88. NOT SURE/DNR | | | | | | | | |
| 536F. DETERMINE FROM THE CALENDAR: 1. CONTRACEPTION USED IN JANUARY 2009 → CONTINUE 2. CONTRACEPTION NOT USED IN JANUARY 2009 → _____ 537. You said that in January of 2009 you were using _____ (WRITE METHOD CODE USED IN COLUMN 2 IN JAN 2009). When did you start using that method? _____ MONTH _____ YEAR 88 DNR MONTH | | | | | | | | |

| | |
|---|--|
| 538F1. INTERVIEWER: VERIFY Q507, Q508, AND COLUMN 2 IN THE CALENDAR FOR THE MONTH OF THE INTERVIEW | 1. CURRENTLY USING MALE/FEMALE STERILIZATION (A or B) → Q552F 2. CURRENTLY USING ANOTHER METHOD (C-Y) → Q544 3. NOT CURRENTLY USING A CONTRACEPTIVE METHOD: CONTINUE |
| 539. Do you think you are physically able to get pregnant <u>at the present time</u> ? | 1. YES → Q541 2. CURRENTLY PREGNANT → Q542 3. NO 8. NOT SURE |
| 540. What is the main reason why you think you cannot get pregnant? | 1. DOES NOT HAVE A PARTNER/NO SEXUAL RELATIONS → Q542 2. RESPONDENT CURRENTLY IS BREAST-FEEDING /POSTPARTUM → Q542 3. PELVIC INFLAMMATORY DISEASE (PID) 4. HORMONAL DYSFUNCTION 5. HYSTERECTOMY (SURGICAL REMOVAL OF UTERUS) 6. PREMENOPAUSE/ MENOPAUSE Q544 7. OVARIAN CYSTS/ OVARIAN DYSFUNCTION 8. RESPONDENT HAD BOTH TUBES REMOVED OR OBSTRUCTED 9. SHE DID NOT SUCCEED TO GET PREGNANT IN THE PAST 2 YEARS 10. PARTNER IS INFERTILE 11. CURRENTLY USES A METHOD (GO BACK TO Q507 AND CORRECT SECTION) 12. OTHER (SPECIFY) _____ 88. DOES NOT KNOW 99. REFUSED TO ANSWER |
| 541. Why are you not using a method to prevent pregnancy now? PROBE: Any other reason? RECORD ALL MENTIONED | A. SHE WANTS TO GET PREGNANT B. NO SEXUAL RELATIONS C. HEALTH / MEDICAL REASONS D. POSTPARTUM / BREASTFEEDING E. RESPONDENT OPPOSES CONTRACEPTIVES F. PARTNER OPPOSES G. PARTNER WANTS HER TO BECOME PREGNANT H. HEALTH CONCERNS I. FEAR OF SIDE EFFECTS J. SOURCES FAR AWAY K. LACK OF KNOWLEDGE OF METHODS L. LACK OF KNOWLEDGE OF A SOURCE M. LACK OF ACCESS/TOO FAR N. CAN'T AFFORD COST O. HEALTH CARE PROVIDER / PHARMACIST WON'T GIVE THEM P. RELIGION AGAINST Q. FATALISTIC R. OTHER (SPECIFY): _____ Y. NOT SURE |
| 542. Do you think you will use a contraceptive method any time in the future? | 1. YES 2. NO → Q544 8. NOT SURE → Q544 |
| 543. What method would you want to use most? | 1. FEMALE STERILIZATION, TUBAL LIGATION 2. MALE STERILIZATION, VASECTOMY 3. IUD 4. INJECTABLES 5. IMPLANT 6. PILL 7. MALE CONDOM 8. FEMALE CONDOM 9. DIAPHRAGM 10. FOAM/JELLY 11. LAM 12. RHYTHM 13. WITHDRAWAL 14. OTHER MODERN METHOD _____ (SPECIFY) 15. OTHER TRADITIONAL METHOD: _____ (SPECIFY) 88. UNDECIDED |

| | |
|--|---|
| <p>544. Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? (IF CURRENTLY PREGNANT ADD: "after this pregnancy?")</p> | <p>1. WANT A(ANOTHER) CHILD 2. NOT ABLE TO GET PREGNANT → Q552F 3. NO MORE CHILDREN → Q547 4. GOD'S WILL, FATE → Q547 8. NOT SURE → Q547</p> |
| <p>545. IF NOT PREGNANT, ASK:</p> <p>How many additional children would you like to have?</p> <p>IF CURRENTLY PREGNANT, ASK:</p> <p>After this pregnancy, how many more children would you like to have?</p> | <p><input type="text"/><input type="text"/> CHILDREN</p> <p>66. AS MANY AS POSSIBLE 67. GOD'S WILL, FATE 88. NOT SURE</p> |
| <p>546. IF NOT PREGNANT, ASK:</p> <p>How long would you like to wait from now before the birth of a/another child?</p> <p>IF CURRENTLY PREGNANT, ASK:</p> <p>How long would you like to wait for the birth of another child, after the birth of the child you are currently expecting?</p> | <p>000. RIGHT AWAY, AS SOON AS POSSIBLE</p> <p>2. <input type="text"/><input type="text"/> MONTHS</p> <p>3. <input type="text"/><input type="text"/> YEARS</p> <p>666. AFTER MARRIAGE 777. GOD'S WILL 888. NOT SURE</p> |
| <p>547. Do you think you (or your partner) would be interested in having an operation to prevent you from having any more children?</p> <p>IF THE RESPONDENT WANTS TO HAVE MORE CHILDREN (Q544=1) ADD:</p> <p>"After having all the children you want?"</p> | <p>1. YES 2. NO → Q551 3. NOT ABLE TO GET PREGNANT → Q552F 8. NOT SURE</p> |
| <p>548. Do you know where to go for this operation?</p> | <p>1. YES → Q550 2. NO 8. NOT SURE</p> |
| <p>549. Do you know where to get information about this operation?</p> | <p>1. YES 2. NO → Q552F</p> |
| <p>550. Where? [IF MORE THAN ONE PLACE MENTIONED, MARK THE ONE SHE WOULD MOST LIKELY USE].</p> | <p>1. GOVERNMENT HOSPITAL _____ (SPECIFY) 2. GOVERNMENT HEALTH CENTER _____ (SPECIFY) 3. GOVERNMENT DISPENSARY _____ (SPECIFY) 4. RELIGIOUS/PRIVATE HEALTH FACILITY 5. PHARMACY 6. NGO 7. CBD/ VILLAGE HEALTH WORKER 8. OTHER _____ (SPECIFY)</p> <p style="text-align: right;">→ Q552F</p> |

| | |
|--|--|
| 551. Why would you not be interested in this operation? | 1. HEALTH RISKS/FEAR OF SIDE EFFECTS 2. FEAR OF OPERATION (SURGERY OR ANESTHESIA) 3. THINKING ABOUT IT 4. PLANS FOR HER/PARTNER TO HAVE STERILIZATION SOON 5. TOO YOUNG 6. TOO OLD (APPROACHING MENOPAUSE) 7. NOT SEXUALLY ACTIVE/NO PARTNER 8. PARTNER OPPOSES 9. MIGHT WANT ANOTHER CHILD 10. LACK OF INFORMATION ABOUT THE METHOD OR WHERE TO OBTAIN IT 11. MEDICAL FACILITY TOO FAR AWAY 12. COST/LACK OF MONEY TO PAY FOR IT 13. DOCTOR REFUSED TO DO THE OPERATION/ADVISED AGAINST 14. RELIGIOUS REASONS 15. PREFERS (OR USES) OTHER CONTRACEPTIVE METHODS 16. OTHER (SPECIFY) _____ 88. DOES NOT KNOW |
| 552F. CHECK Q320: DOES THE WOMAN HAVE ANY LIVING CHILDREN? | 1. YES 2. NO → Q553B |
| 553A. If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE. | <div style="display: flex; align-items: center;"> <input style="width: 30px; height: 20px; border: 1px solid black; margin-right: 5px;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black; margin-right: 5px;" type="text"/> CHILDREN </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> 00. NONE 77. FATE, UP TO GOD 88. NOT SURE 96. OTHER _____ (SPECIFY) </div> <div style="text-align: right;">→ Q554F</div> </div> |
| 553B. If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE. | <div style="display: flex; align-items: center;"> <input style="width: 30px; height: 20px; border: 1px solid black; margin-right: 5px;" type="text"/> <input style="width: 30px; height: 20px; border: 1px solid black; margin-right: 5px;" type="text"/> CHILDREN </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> 00. NONE 77. FATE, UP TO GOD 88. NOT SURE 96. OTHER _____ (SPECIFY) </div> </div> |
| 554F. CHECK Q507, Q508 | <div style="display: flex; justify-content: space-between;"> <div> 1. NOT CURRENTLY USING A CONTRACEPTIVE METHOD 2. USING FEMALE STERILIZATION OR MALE STERILIZATION (A, B) 3. USING A TRADITIONAL METHOD (L, M, Y) 4. USING OTHER MODERN METHOD → CONTINUE </div> <div style="text-align: right; font-size: 2em;">}</div> <div style="text-align: right; vertical-align: middle;"> SECTION VI. </div> </div> |
| 555F. CHECK Q201 | 1. NOT CURRENTLY IN UNION (Q201=3) → SECTION VI. 2. WOMAN CURRENTLY IN UNION (Q201=1 OR 2) → CONTINUE |
| 556. Does your husband/partner know that you are using a method of family planning? | 1. YES 2. NO 8. NOT SURE |
| 557. Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together? | 1. MAINLY RESPONDENT 2. MAINLY HUSBAND/PARTNER 3. JOINT DECISION 4. OTHER _____ (SPECIFY) |

SECTION VI: SEXUAL ACTIVITY AND CHILDBEARING

| CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY. | |
|--|--|
| 600A. Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How long ago did you last have sexual intercourse? | 000. NEVER HAD SEXUAL INTERCOURSE → SECTION VII 1. ____ DAYS 2. ____ WEEKS 3. ____ MONTHS 4. ____ YEARS 888. DOES NOT REMEMBER |
| 600B. At the time of your last sexual intercourse, did you or your partner use any contraceptive method? | 1. YES 2. NO → Q600D 8. DOES NOT REMEMBER → Q600D 9. REFUSED → Q600D |
| 600C. What was this method? INTERVIEWER: VERIFY RESPONSE WITH Q502, 507, 508, AND CALENDAR | 1. FEMALE STERILIZATION, TUBAL LIGATION 2. MALE STERILIZATION, VASECTOMY 3. IUD 4. INJECTABLES 5. IMPLANT 6. PILL 7. MALE CONDOM 8. FEMALE CONDOM 9. DIAPHRAGM 10. FOAM/JELLY 11. LAM 12. RHYTHM 13. WITHDRAWAL 14. OTHER MODERN METHOD _____ (SPECIFY) 15. OTHER TRADITIONAL METHOD: _____ (SPECIFY) |
| 600D. How old were you when you had sexual intercourse for the very first time? | <div style="border: 1px solid black; display: inline-block; width: 40px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 40px; height: 20px; margin-right: 5px;"></div> AGE IN YEARS 88. DOES NOT REMEMBER 99. REFUSED |
| 601F. INTERVIEWER: CHECK AGE OF RESPONDENT (Q102) | 1. 15-24 YEARS 2. 25-49 YEARS → SECTION VII |
| 603. What was your relationship with the person with whom you first had sexual intercourse? | 1. HUSBAND/LIVE-IN PARTNER 2. FIANCÉ 3. BOYFRIEND 4. FRIEND 5. ACQUAINTANCE 6. RELATIVE 7. JUST MET 8. RAPE/INCEST → Q611F 9. OTHER (SPECIFY) _____ 88. DOES NOT REMEMBER 99. REFUSED |
| 604. How old was the person you first had sexual intercourse with? PROBE: "Was this person older than you, younger than you, or about the same age as you?" AND OBTAIN AN ESTIMATE. | <div style="border: 1px solid black; display: inline-block; width: 40px; height: 20px; margin-right: 5px;"></div> <div style="border: 1px solid black; display: inline-block; width: 40px; height: 20px; margin-right: 5px;"></div> AGE IN YEARS → Q605 88. DOES NOT REMEMBER 99. REFUSED IF "88" OR "99" ASK Q604A; OTHERWISE GO TO Q605 |
| 604A. How much older or younger was the person with whom you had your first sexual experience? Was he.... (READ 1-4) 1. More than 10 years older? 2. 5-10 years older? 3. Less than 5 years older? 4. Younger? | 1. MORE THAN 10 YEARS OLDER 2. 5-10 YEARS OLDER 3. LESS THAN 5 YEARS OLDER 4. YOUNGER 8. DOESN'T KNOW |

| | |
|--|---|
| 605. How would you describe the first time you had sexual intercourse? Would you say that you wanted to have sex, you did not want to have sex but it happened anyway, or were you forced to have sex? | 1. WANTED TO HAVE SEX 2. DID NOT WANT BUT IT HAPPENED ANYWAY 3. FORCED TO HAVE SEX 8. DOES NOT REMEMBER |
| 606. The first time you had sexual intercourse did you or your partner use a contraceptive method? | 1. YES 2. NO → Q610 8. DOES NOT REMEMBER → Q610 9. REFUSED → Q610 |
| 607. What was this method? | 1. FEMALE STERILIZATION, TUBAL LIGATION 2. MALE STERILIZATION, VASECTOMY 3. IUD 4. INJECTABLES 5. IMPLANT 6. PILL 7. MALE CONDOM 8. FEMALE CONDOM 9. DIAPHRAGM 10. FOAM/JELLY 11. LAM 12. RHYTHM → Q609 13. WITHDRAWAL → Q609 14. OTHER MODERN METHOD _____ (SPECIFY) 15. OTHER TRADITIONAL METHOD: _____ (SPECIFY) |
| 608. Where did you get this method? | 1. GOVERNMENT HOSPITAL _____ (SPECIFY) 2. GOVERNMENT HEALTH CENTER _____ (SPECIFY) 3. GOVERNMENT DISPENSARY _____ (SPECIFY) 4. RELIGIOUS/PRIVATE HEALTH FACILITY 5. PHARMACY 6. NGO 7. CBD/ VILLAGE HEALTH WORKER 8. OTHER _____ (SPECIFY) |
| 609. Whose decision was it to use the method? Was it ... (READ 1-3) 1. Your decision? 2. Your partner's decision? 3. Decision made together? | 1. YOUR DECISION 2. YOUR PARTNER'S DECISION 3. DECISION MADE TOGETHER 8. DOES NOT REMEMBER |
| Q611F | |
| 610. What was the main reason for not using a contraceptive method at the time of first sexual intercourse? | 1. SEX WAS NOT EXPECTED 2. DID NOT KNOW ABOUT CONTRACEPTION 3. DID NOT KNOW WHERE TO GET CONTRACEPTIVES 4. DID NOT THINK IT WAS NECESSARY 5. PARTNER OBJECTED 6. RESPONDENT OBJECTED 7. SHE WANTED TO BECOME PREGNANT 8. NEGLIGENCE 9. COULD NOT GET A METHOD/ NOT AVAILABLE 10. TOO EXPENSIVE 11. FORCED SEX 12. OTHER _____ (SPECIFY) 88. DOES NOT KNOW / DOES NOT REMEMBER |
| 611F. INTERVIEWER, CHECK Q314 ON PAGE 4 AND RECORD IF RESPONDENT HAD EVER HAD A LIVE BIRTH | 1. YES 2. NO → GO TO SECTION VII |
| 612. When pregnant with your first child, were you still in school? | 1. YES 2. NO → GO TO SECTION VII |
| 613. What level and grade of schooling were you in? | 1. PRIMARY _____ 2. SECONDARY _____ 77. TERTIARY LEVEL OF EDUCATION 99. OTHER |
| 613A. Did you have to leave school because of the pregnancy? | 1. YES 2. NO → GO TO SECTION VII |
| 614. After the first child was born, did you return to school? | 1. YES 2. NO |

SECTION VII – ATTITUDES TOWARDS CONTRACEPTION AND CHILDBEARING

| 700. | Now I would like to talk about something else. Have you ever tried to obtain a contraceptive method and been refused? | 1. YES 2. NO → Q703A 8. DOES NOT REMEMBER → Q703A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|------------------|--------------------------------|--|---|---|--|---|---|-------------------------------------|---|---|--|---|---|-------------|---|---|--------|---|---|-------------------------------|---|---|--------------------------|---|---|
| 701. | How many times have you been refused? | <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block; margin-right: 5px;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block; margin-right: 5px;"></div> TIMES 88. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 702. | In what place were you refused a contraceptive method? PROBE: Any place else? (CIRCLE '1' FOR ALL RESPONSES MENTIONED) | <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th><th style="width: 10%; text-align: center;"><u>MENTIONED</u></th><th style="width: 20%; text-align: center;"><u>NOT MENTION- ED</u></th></tr> </thead> <tbody> <tr> <td>A. GOVERNMENT HOSPITAL _____ (SPECIFY)</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>B. GOV'T HEALTH CENTER _____ (SPECIFY)</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>C. GOV'T DISPENSARY _____ (SPECIFY)</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>D. RELIGIOUS / PRIVATE HEALTH FACILITY</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>E. PHARMACY</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>F. NGO</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>G. CBD/ VILLAGE HEALTH WORKER</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> <tr> <td>H. OTHER _____ (SPECIFY)</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td></tr> </tbody> </table> | | <u>MENTIONED</u> | <u>NOT MENTION- ED</u> | A. GOVERNMENT HOSPITAL _____ (SPECIFY) | 1 | 2 | B. GOV'T HEALTH CENTER _____ (SPECIFY) | 1 | 2 | C. GOV'T DISPENSARY _____ (SPECIFY) | 1 | 2 | D. RELIGIOUS / PRIVATE HEALTH FACILITY | 1 | 2 | E. PHARMACY | 1 | 2 | F. NGO | 1 | 2 | G. CBD/ VILLAGE HEALTH WORKER | 1 | 2 | H. OTHER _____ (SPECIFY) | 1 | 2 |
| | <u>MENTIONED</u> | <u>NOT MENTION- ED</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. GOVERNMENT HOSPITAL _____ (SPECIFY) | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. GOV'T HEALTH CENTER _____ (SPECIFY) | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C. GOV'T DISPENSARY _____ (SPECIFY) | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D. RELIGIOUS / PRIVATE HEALTH FACILITY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E. PHARMACY | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F. NGO | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G. CBD/ VILLAGE HEALTH WORKER | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H. OTHER _____ (SPECIFY) | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703. | What was the gender of the <u>last person</u> who refused to provide a contraceptive method? | 1. MALE 2. FEMALE 8. DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703A. | What is your <u>preferred source of information</u> about family life or sex education topics? | 1. PARENT(S) / GUARDIAN(S) 2. SISTER(S) OR BROTHER(S) 3. OTHER RELATIVE 4. TEACHERS 5. PEERS / FRIENDS 6. HELP LINE 7. RADIO PROGRAM 8. OTHER RADIO ADVERTISEMENTS OR MESSAGES 9. "YOUTH" TV PROGRAM 10. OTHER TELEVISION PROGRAMS OR MESSAGES 11. PRINTED MATERIALS (BOOKS, BROCHURES, POSTERS) 12. YOUTH INFORMATION CENTER 13. YOUTH/SUMMER CAMP 14. RELIGIOUS/TRADITIONAL EVENT 15. HEALTH WORKER 16. OTHER (SPECIFY): _____ 88. DOES NOT KNOW | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703B. | If you wanted to get information on family planning, who would you like to talk to most? | 1. CBD WORKER 2. CLINIC STAFF 3. TBA 4. HUSBAND/PARTNER 5. FRIEND 6. RELATIVE 7. RELIGIOUS LEADERS 8. OTHER _____ (SPECIFY) | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 703C. Is it acceptable to you for information on family planning to be provided: (READ 1-5) 1. On the radio? 2. On the television? 3. In a newspaper or magazine? 4. In school? 5. In religious settings (church/mosque/etc?) | <table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>1. RADIO</td> <td>1</td> <td>2</td> </tr> <tr> <td>2. TELEVISION</td> <td>1</td> <td>2</td> </tr> <tr> <td>3. NEWSPAPER/MAG</td> <td>1</td> <td>2</td> </tr> <tr> <td>4. SCHOOL</td> <td>1</td> <td>2</td> </tr> <tr> <td>5. CHURCH/MOSQUE</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | 1. RADIO | 1 | 2 | 2. TELEVISION | 1 | 2 | 3. NEWSPAPER/MAG | 1 | 2 | 4. SCHOOL | 1 | 2 | 5. CHURCH/MOSQUE | 1 | 2 | | | | | | | | | | | | | | | | | | |
|--|---|---------|------------|-------------|-------------------|-------------|-------------------|---|---|---|------------------|---|---|--|---|---|------------------|---|---|-----------------|---|---|---------------|---|---|-----------------|---|---|-------------|---|---|-----------------------|---|---|---|---|---|
| | YES | NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. RADIO | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. TELEVISION | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. NEWSPAPER/MAG | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. SCHOOL | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. CHURCH/MOSQUE | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703D. In the last 6 months have you heard about family planning: (READ 1-9) 1. On the radio? 2. On the television? 3. In a newspaper or magazine? 4. From a poster? 5. From billboards? 6. At community events? 7. From live drama? 8. From a doctor or nurse? 9. From a community health worker? | <table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>1. RADIO</td> <td>1</td> <td>2</td> </tr> <tr> <td>2. TELEVISION</td> <td>1</td> <td>2</td> </tr> <tr> <td>3. NEWSPAPER/MAG</td> <td>1</td> <td>2</td> </tr> <tr> <td>4. POSTER</td> <td>1</td> <td>2</td> </tr> <tr> <td>5. BILLBOARDS</td> <td>1</td> <td>2</td> </tr> <tr> <td>6. COMM. EVENTS</td> <td>1</td> <td>2</td> </tr> <tr> <td>7. LIVE DRAMA</td> <td>1</td> <td>2</td> </tr> <tr> <td>8. DOCTOR/NURSE</td> <td>1</td> <td>2</td> </tr> <tr> <td>9. COMM. HW</td> <td>1</td> <td>2</td> </tr> </tbody> </table> | | YES | NO | 1. RADIO | 1 | 2 | 2. TELEVISION | 1 | 2 | 3. NEWSPAPER/MAG | 1 | 2 | 4. POSTER | 1 | 2 | 5. BILLBOARDS | 1 | 2 | 6. COMM. EVENTS | 1 | 2 | 7. LIVE DRAMA | 1 | 2 | 8. DOCTOR/NURSE | 1 | 2 | 9. COMM. HW | 1 | 2 | | | | | | |
| | YES | NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. RADIO | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. TELEVISION | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. NEWSPAPER/MAG | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. POSTER | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. BILLBOARDS | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6. COMM. EVENTS | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7. LIVE DRAMA | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. DOCTOR/NURSE | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. COMM. HW | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 703E. Do you personally own a cell phone? | 1. YES 2. NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 704A. Have you heard of the Wazazi Nipendeni safe motherhood text message campaign? | 1. YES 2. NO → Q706 8. DON'T KNOW → Q706 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 704B. Have you registered to receive the messages? | 1. YES → Q706 2. NO 8. DON'T KNOW → Q706 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 704C. Have you considered registering to receive the messages? | 1. YES 2. NO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 706. Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. CARD READS: 'FAMILY PLANNING INFORMATION IS AVAILABLE AT THE HOSPITAL' IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me? | 1. CANNOT READ AT ALL 2. ABLE TO READ ONLY PARTS OF SENTENCE 3. ABLE TO READ WHOLE SENTENCE 4. NO CARD WITH REQUIRED LANGUAGE 5. BLIND/VISUALLY IMPAIRED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 707. In the last 6 months, have you heard or seen a message on radio or television giving information about ... (READ A-E) A. Delivering your baby in a health facility? B. Developing a Birth Plan in pregnancy? C. HIV/AIDS? D. Other STDs? E. Domestic Violence? | <table border="1"> <thead> <tr> <th></th> <th>RADIO ONLY</th> <th>TV ONLY</th> <th>YES BOTH</th> <th>NO, NEITHER</th> <th>DOES NOT REMEMBER</th> </tr> </thead> <tbody> <tr> <td>A. Delivering your baby in a health facility?</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>B. Developing a Birth Plan in pregnancy?</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>C. HIV/AIDS?</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>D. Other STDs?</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>E. Domestic Violence?</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> </tbody> </table> | | RADIO ONLY | TV ONLY | YES BOTH | NO, NEITHER | DOES NOT REMEMBER | A. Delivering your baby in a health facility? | 1 | 2 | 3 | 4 | 8 | B. Developing a Birth Plan in pregnancy? | 1 | 2 | 3 | 4 | 8 | C. HIV/AIDS? | 1 | 2 | 3 | 4 | 8 | D. Other STDs? | 1 | 2 | 3 | 4 | 8 | E. Domestic Violence? | 1 | 2 | 3 | 4 | 8 |
| | RADIO ONLY | TV ONLY | YES BOTH | NO, NEITHER | DOES NOT REMEMBER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A. Delivering your baby in a health facility? | 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Developing a Birth Plan in pregnancy? | 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C. HIV/AIDS? | 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D. Other STDs? | 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E. Domestic Violence? | 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 708. In your opinion, how would you describe the following contraceptive methods with regard to their effectiveness in preventing pregnancy? If the method is used correctly, would you say (READ METHOD A-D) is very effective, effective, somewhat effective, or not effective? A. Pill B. Injection C. Condom D. Implants / IUDs | <table border="1"> <thead> <tr> <th><u>VERY EFFECTIVE</u></th> <th><u>EFFECTIVE</u></th> <th><u>SOMEWHAT EFFECTIVE</u></th> <th><u>NOT EFFECTIVE</u></th> <th><u>DOES NOT KNOW</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> </tbody> </table> | <u>VERY EFFECTIVE</u> | <u>EFFECTIVE</u> | <u>SOMEWHAT EFFECTIVE</u> | <u>NOT EFFECTIVE</u> | <u>DOES NOT KNOW</u> | 1 | 2 | 3 | 4 | 8 | 1 | 2 | 3 | 4 | 8 | 1 | 2 | 3 | 4 | 8 | 1 | 2 | 3 | 4 | 8 | | | | | |
|--|---|-----------------------------------|----------------------|-----------------------------------|----------------------|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| <u>VERY EFFECTIVE</u> | <u>EFFECTIVE</u> | <u>SOMEWHAT EFFECTIVE</u> | <u>NOT EFFECTIVE</u> | <u>DOES NOT KNOW</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 709. Couples may use condoms to avoid getting sexually transmitted diseases. How effective do you think a properly used condom is for this purpose? | <table border="1"> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> </tbody> </table> | 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 710. In your opinion, how would you describe the following contraceptive methods with regard to their risk of developing health problems? If the method is used correctly, would you say (READ METHOD A-D) is very safe, safe, somewhat safe, or not safe? A. Pill B. Injection C. Condom D. Implants / IUDs | <table border="1"> <thead> <tr> <th><u>VERY SAFE</u></th> <th><u>SAFE</u></th> <th><u>SOMEWHAT SAFE</u></th> <th><u>NOT SAFE</u></th> <th><u>DOES NOT KNOW</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>8</td> </tr> </tbody> </table> | <u>VERY SAFE</u> | <u>SAFE</u> | <u>SOMEWHAT SAFE</u> | <u>NOT SAFE</u> | <u>DOES NOT KNOW</u> | 1 | 2 | 3 | 4 | 8 | 1 | 2 | 3 | 4 | 8 | 1 | 2 | 3 | 4 | 8 | 1 | 2 | 3 | 4 | 8 | | | | | |
| <u>VERY SAFE</u> | <u>SAFE</u> | <u>SOMEWHAT SAFE</u> | <u>NOT SAFE</u> | <u>DOES NOT KNOW</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 711. To what extent do you agree or disagree with the following statements? Do you strongly disagree, disagree, neither disagree nor agree, agree, or strongly agree? (READ STATEMENTS A-E.) A. Family planning is important for the welfare of a family. B. Use of birth control pills or injections will reduce my ability to get pregnant in the future. C. The decision to use contraception or not is one that should be made equally by the man and woman. D. Families should only have children if they can afford to take care of their needs, including food, health care, clothing, and schooling. E. Families should have many children because some of them will die. | <table border="1"> <thead> <tr> <th><u>STRONGLY DISAGREE</u></th> <th><u>DISAGREE</u></th> <th><u>NEITHER DISAGREE NOR AGREE</u></th> <th><u>AGREE</u></th> <th><u>STRONGLY AGREE</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </tbody> </table> | <u>STRONGLY DISAGREE</u> | <u>DISAGREE</u> | <u>NEITHER DISAGREE NOR AGREE</u> | <u>AGREE</u> | <u>STRONGLY AGREE</u> | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| <u>STRONGLY DISAGREE</u> | <u>DISAGREE</u> | <u>NEITHER DISAGREE NOR AGREE</u> | <u>AGREE</u> | <u>STRONGLY AGREE</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 712. How old do you think it is best for a child to be before another child is born? | <div> <input type="text"/> <input type="text"/> MONTHS </div> 66. FATE, UP TO GOD 77. MORE THAN 5 YEARS 88. NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 713. How old do you think a child should be before the mother stops breastfeeding him / her? | <div> <input type="text"/> <input type="text"/> MONTHS </div> 77. NO AGE LIMIT, AS LONG AS POSSIBLE 88. NOT SURE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| |
|---|
| 714. THANK THE RESPONDENT FOR PARTICIPATING IN THE SURVEY AND RECORD THE TIME THE INTERVIEW HAD ENDED: <div> <input type="text"/> <input type="text"/> HOUR <input type="text"/> <input type="text"/> MIN </div> |
|---|

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS:

NAME OF SUPERVISOR:

